Logic Gui Professional

- Software -
Version 5.6

User Manual
English

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1. Overview

1.1 What is Logic Gui

Logic Gui is a Form Editor for MaxGui, the Blitzmax Gui module.

(Blitzmax and MaxGui is Copyright by Blitz Research Ltd www.Blitzbasic.com)

You can arrange a complete window with all gadgets and Logic Gui will then create the source code for you. Thus its saves you a huge amount of time. Changing a position is now just as simple as moving the mouse. Try several forms for your application without re-doing all the properties. Re-use your work again for new projects. Saved forms can be inserted in new forms and serve as templates.

1.2 How does it work

Simply move and size gadgets with the mouse to the place you want.

Edit the properties of the gadget or use the default.

Create the source.

1.3 How does Logic Gui help you to arrange your form

Logic Gui has several tools which can assist you in positioning and sizing your items.

Use Align, Design Range, Stretch, Trim, Automatic Distribute, Step&Repeat, Grouping, Locking, Measure, Grid... Or you use absolute and relative coordinates with automatic calculation relative to any of the items edges to move your gadgets to the right position.

1.4 What kind of gadgets are supported

Logic Gui supports all gadgets at the time this text is written (Blitzmax Version 1.48 / MaxGui 1.42). Additional you can make use of iconstrips, toolbars and menus (windows- and popupmenus). Several windows can be managed in one go. Beside the MaxGui gadgets there are also Splitter, ScrollPanels and SmartButtons available to enhance your form.

1.5 Source Code

A complete well sorted and aligned source code, consisting of gadget creation code, event queue and function calls. Use the standard event loop or an OOP style as you like. An easy GUI assists you in setting the properties for every gadget with a lot of options. The complete source is SuperStrict compatible. All used variables can be defined as Local and will be transferred to the functions. The generated functions will produce full debug information when compiled in debug mode. The created source can be compiled directly, loaded into your editor, put to the clipboard or just saved to file.

Paths requested by Logic Gui for various things are all converted directly into relative paths if possible.

1.6 The Program

Logic Gui is written in Blitzmax for Windows. While the source code is created for Blitzmax with MaxGui module, all forms are saved as XML files. But not the forms only, also every iconstrip, menu or toolbar property can be saved as XML and re-used in other projects or also several times in the same project.

You can have a look at those files, i think they can be easily understood (hopefully). Feel free to build a converter to other languages...

2. Quick Start

2.1 The archive

You receive Logic Gui with the current release notes packed in an archive (normally a standard .zip or .rar file). Unpack the archive. Double click Logic Gui. That's it – nothing to install!

Logic Gui will open two windows the first time (Gagdet tree and WorkSpace). Some more tool windows are available when chosen from the view menu.

Note: Logic Gui needs write access to it's ini file (defaults.xml), source code and form files. Adjust your security settings accordingly.

2.2 The setup

Place any tool window you want and size them.

If you like, set your grid type and spacing.

Press the green RUN button in the toolbar of the gadget tree window to force a compile of the current (still empty) form.

Note: The first time you try to run your editor or the BlitzMax compiler and Logic Gui can't find those at the default location you will be ask to locate them manually. Use the file requester which opens to do so. The result will be stored for the future in Logic Gui's config file.

That's all.

You should now quit and restart the program with the new settings from your environment!

All should show up as you defined it.

Ready to start!

3. First steps

When Logic Gui has started you will see at least two windows. One window shows a grid, this is the place where you put your gadgets together (WorkSpace). And the other window has a treeview and menu visible. The treeview is where you select, what kind of gadget you want to add to your form.

3.1 Available gadgets

Open the treeview nodes to see what's available.

As you can see, the category "Buttons" holds different types of buttons. Actually you are able to convert any button into any other button type, but if you choose directly the needed one, it saves you some time and additional there is a default size for every single item.

3.2 Adding gadgets to the form

Double click e.g. The "Push Button" inside the treeview and move the Mouse over to the WorkSpace window. The mouse pointer has now changed to a cross and a transparent Button is visible. The cross represents an edge of the gadget you want to place.

You can now decide between two possibilities:

A single click places the gadget with a default size onto the workspace. Or press down the left mouse button and hold down while sizing the new gadget to the needed size (all directions).

Play around and place some more gadgets. Every gadget added will get a generic variable name and text. While you of course would change the text to your needs, you should do the same also to the variable name and give it some meaningful description for your program. Easiest way to do it is via the Gadget Control Center window, you can open it from the view menu.

When you add parent or container gadgets, like panels, tabber, windows and such, they will be sorted automatically in the background, other stuff automatically in the foreground.

3.3 Select a gadget

You will recognize that a selected gadget shows up with a red border. Select another gadget by single click on it or create a frame around one or more gadgets (also multi select). Shift click (LMB) to add or subtract a gadget from the selection.

When a parent or container gadget was selected, all child gadgets are selected as well. Ready to move or size, all in one go. If you want to select the parent alone, press the CTRL button while left clicking on it.

De-select any item by clicking into the WorkSpace background (or press ESC)!

A green frame is shown for a multi selection. While creating the selection with the mouse all items which are completely inside are detected on the fly and recognized in the inner green selection. Still every item which is selected gets a red border. But one has an additional blue border which marks this one as the primary gadget! Every action which needs a reference will use this primary gadget for it. As an example take the Align Function: If you ask to Align to top, all other gadgets get moved to line up with the primary gadget.

3.4 Size a gadget

When a gadget is selected move the mouse inside and close to the border. At every edge and every side the mouse pointer will change and show in which direction it's possible to resize the gadget (8 Directions). Press and hold down the left mouse button to do so.

Manual Size: *If you press Ctrl and one of the cursor keys, your selection grow one pixel in that direction and together with shift if grows 5 pixel. If you press Alt and one of the cursor keys it will shrink in the opposite direction one pixel and together with shift 5 pixel. Checkout also + and – keys for equal grow and shrink (see shortcuts) in different directions.*

3.5 Move a gadget

When you click on a gadget and and hold down the left mouse button you can move the gadget around. As you can see, it's very easy to size and position any item. If you press **Shift** *or* **CTRL** *the movement is limited to horizontal or vertical directions.*

During movement of a gadget the connection or disconnection to a parent gadget is done on the fly. The only important rule to have this working is that the child gadget needs to be one pixel inside the parent gadget.

Manual Move: *If you press one of the cursor keys, your selection is moved one pixel in that direction. Hold down shift and you move it 5 pixel. Use the Magnifier Window to determine how close you are.*

When all gadgets are in place, we are ready to create the source of it.

3.6 Test the form

Have a "Standard Window" and some gadgets on top to get some output.

Press the green run button to compile the form (Can be found in the toolbar of the gadget tree window).

You will notice that a "Process Output" window pops up if not yet open and shows the output of the compile process and debug information from the new form.

Congratulation! Your first form has been done.

Note: *When you start playing with Logic Gui and compile different test forms, you may notice that the WorkSpace itself can produces a window. This window is not meant as application window, it's for testing only. You can switch it on/off in the Properties Editor.*

4. Workflow

4.1 Concept

How long does it take to adjust gadgets manually? How long does it take to create a multi language form? Logic Gui tries to give you all tools you need to create a form in a visual way, without wasting time.

While having a lot of tools, all should be clean and simple. We all work different and not everyone needs everything offered by Logic Gui. The idea is, that things are put in tool windows and the user only opens what he needs. You can start and work very simple, or dig deep into the design and use advanced features.

There are no shiny sounds or graphics, it's only implemented what does the job. There is no installer, where you don't know what it's doing, just run it from your USB stick if you like. There are no entries written to your registry and bloating it with strange keys, it's not needed and not wanted. There are no cryptic binary files for your configuration or form files, they are human readable XML files you can edit with notepad. There is no 100% CPU usage and your computer fan is running wild, it's completely event based and doesn't use any power if not needed.

The main purpose of Logic Gui is of course the GUI design, but if you ever try to change a GUI inside your program, you know it is a pain. If it's possible, one should always try to keep the form intact (in sync) with the rest of the program. Therefore Logic Gui does not only creates the form design code for you, but lets you add all things needed to run your program. Thus a change in the GUI, does not break the code, because Logic Gui knows where to put the changes.

When you add your own modules, types, functions and whatever is needed, those stuff is stored in external files. This is done to give you the ability to have them opened in parallel in your favorite editor. That means you can work on your form in Logic Gui and writing supporting functions in your own IDE and all will be put together in the program source code.

4.2 Designing a form

Again, we are all different in doing our stuff and thus the way the GUI will be done would also differ.

1. *Imagine you wrote a complete program, but the GUI part is missing. That would be perfect! You know exactly what your program needs, because its ready. You only have to decide how the controls should ask for the values you need as input and how to present the output.*
2. *Imagine you have an idea of the program and something done, but don't know yet how the final version will look like. You start designing the form, but it has constantly to change as the program grows.*
3. *Imagine you collect ideas for your program and add the gadgets needed for it to the form to check how it would look like and after everything is in place, you start filling in the code to get it working.*

To cover all those different ways, we can use available tools to get our GUI in a short time.

The design itself of the form would almost be the same. We move, size, align, distribute our gadgets. The only difference is may be when you know already what you want and don't have to try some layouts.

For number one you can create the form and just copy the code you need, that's it.

For number two you can create the form and either copy the code or insert your program code into Logic Gui. When the programs grows, you can use the Parser to sync the code with the form where possible.

For number three you could write your functions in parallel to Logic Gui and have them in the Append file. While trying out different layouts or gadgets, use the gadget conversion or parking of gadgets.

While Logic Gui is only available for Windows, you may use the cross platform possibility of BlitzMax and use the source created also on MacOs or Linux. If you develop for different platforms you may want to have the GUI also slightly different. Use the layer technique in Logic Gui to have platform specific gadgets separated and switch them on or off as you wish.

4.3 Possible Workflow steps

1. *Use New to clear the current form and reload default settings from the ini file. Use 'Save As' to save the still empty form to a new folder. All enabled application files are copied to the new location, ready to alter them for the new form.*
2. *Decide which kind of source code should be produced. Standard WaitEvent() loop for all gadgets or an independent Type for every window (OOP like).*
3. *Add your gadgets to the form. Use perhaps different layers, for instance put the children in a sublayer of a parent gadget, thus you can switch it on/off independently.*
4. *Move and size the gadgets as needed.*
5. *Run the form and check the debug output for a first overview.*
6. *Rename the gadget variables to meaningful names, try not to leave the generic names (they are only used to have a generic form without conflicts)*
7. *Add your text files, images, iconstrips and whatever is needed.*
8. *Fill the event functions with your code or call your own supporting functions. Use the Properties Editor to customize the gadget (color, fonts, style, view...) and the events even further.*
9. *If the window will be resizable, use the Layout Window to adjust the layout rule for the gadgets when the parent is resized.*
10. *Use the Media Manager to decide how the external medias are handled inside the source.*
11. *Add at any time multi language support.*
12. *Save your form and may archive it also via the export functionality.*

5. Logic Gui Program Structure

5.1 Gadget Window

The gadget window consists out of a menu, a toolbar and a treeview. The menu is used to load a form or display extra tool windows or to check the version info. The toolbar allows you to switch between different working modes and to test the current form. In the treeview you can select gadgets you want to add to your form.

5.1.1 File Menu

5.1.1.1 New

When choosing 'New' from the file menu to start with a brand new form there is the possibility to save or not to save the current form. A requester will popup only if the code is dirty (has changed).

If you proceed the current form will be deleted, all loaded menus removed, gadget counter reseted (responsible for the numbers at the end of every gadget as default) and some default values loaded from the ini file.

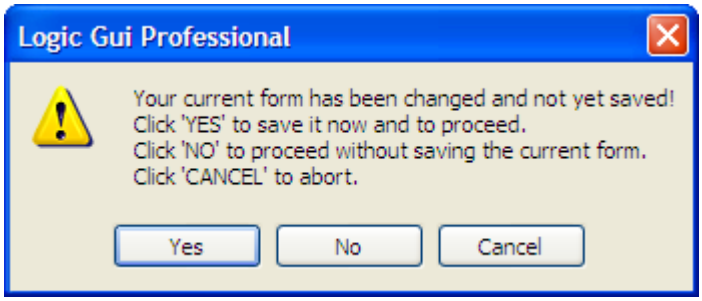

Logic Gui Professional
Your current form has been changed and not yet saved!
Click 'YES' to save it now and to proceed.
Click 'NO' to proceed without saving the current form.
Click 'CANCEL' to abort.
Yes
No
Cancel

Illustration 1: File / New - Save the old form before loading the new one.

***Note:** This step cannot be undone!*

5.1.1.2 Import Form

With Import Form you are able to load an exported Logic Gui file (.ELG). The exported file will be unpacked, the form file loaded and all paths adjusted. All files are ready to access as they are stored relative to the form.*

You can drop also a .ELG file on top of the workspace.

When you choose to import another form and your current code is marked as dirty a reminder will pop up and let you choose to save the old form before loading a new one or skip the save or cancel loading.

5.1.1.3 Export

Export Form

I added the ability to export the form with all external files. This function comes in quite handy when you want to share your form with another Logic Gui user or maybe just with another computer you have Logic Gui installed on. The export-folder contains all toolbars, list based gadget iconstrips, menu iconstrips, textarea texts, button pixmaps, all external pictures or sounds of SmartButtons and pixmaps from panel gadgets. Additional the source code of the form, the form itself as xml and a screenshot are stored. You can compile the source immediately from inside this folder if needed, or import the form again. With every export a logfile is created and saved. The logfile contains a line for every file and an OK or Error statement at the beginning, thus you are able to immediately check if all operations were OK or not and which file belonged to which gadget. At the end this folder is also zipped and stored as .ELG (Export Logic Gui File) which can be imported again.

***Note:** This function can also be used to get rid of all absolute paths in your form.*

Export XML Gui Setup File

This entry allows you to directly export a xml of your GUI to a chosen filename. A standard system filerequester asks you for the file and directory, where to store the new xml file. The file will contain the XML GUI Setup for the current form. This menu entry is may more natural than the dynamically created file from the Properties/Application/XML tab. It also allows you easily to 'freeze' a certain xml output, while the dynamically created file will be overwritten automatically during the next run (test compile of the form).

Export Gadget Creation Function

This will ask for a file and save only the gadget creation part as a function. The function name is taken from the WorkSpace window name, thus you can change it to your needs.

Export All MaxGui Languages

You can export all used languages of your form as MaxGui language ini files from this menu. It is also possible to export a single language from the Language Window. When exporting all at once, the default names will be chosen.

5.1.1.4 Open – Open Form

Load a new Logic Gui form file. A file requester asks you for the new file to load. Alternatively you can drop the 'form'.LG file or the 'form'.png onto the WorkSpace.

A requester warns you, when you try to load a form saved from a newer version. If the XML schema has changed your current version will ignore all new stuff but can normally still load the form. So there is some data lost, which was saved by the newer version and you can decide if you want that. Of course updating to the newest version is always a good idea.

When you choose to import another form and your current code is marked as dirty a reminder will pop up and let you choose to save the old form before loading a new one or skip the save or cancel loading.

5.1.1.5 Open – Open as Untitled

Opens the selected form as an untitled form. That makes it easier to start with something new and not to overwrite the old form by mistake.

5.1.1.6 Open – Open and insert in current form

Insert a Logic Gui form file into the current form. A file requester asks you for the form name.

Note: Every saved form can act as a template to be inserted later.

Logic Gui loads the selected form and checks the names inside that form against the names in your current form. If a conflict occurs you will be notified and the names in question are renamed. The inserted form will be selected and can be moved to it's new position. Thus you can make use of all your templates. See also Save As – Selected

5.1.1.7 Open – Open Form Folder (F6)

Sometimes you want to access the files you put in your folder where the Logic Gui form exists. Instead of changing to windows and open 'MyComputer' and browsing to the correct place, you can just click on this menu or press F6 and Logic Gui opens an explorer window with the direct path to the parent folder.

5.1.1.8 Open Recent Forms

As the name already says you will be able to open some of the recently used forms without browsing, but open it directy. Up to ten form URLs are stored and additional also the date, time and size. All those info are displayed and should help to identify the form you are looking for.

Any form you load will be recorded except the Untitled.LG and the 'Open Recent Forms' are updated immediately. The newest form is always at the top, the oldest at the bottom. Every form info is saved only once and the original info will be updated when changes occur.

5.1.1.9 Save

Saves the current form under the name shown in the WorkSpace title. If the form doesn't have a name yet (still untitled) and you hit save, it asks you for one.

If not changed in the Options Menu, Logic Gui saves your form automatically every few minutes.

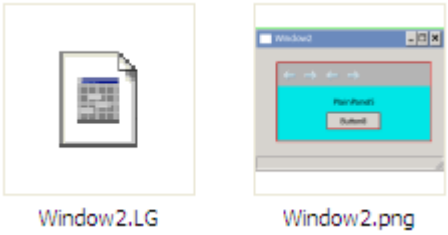


Illustration 2: Save - Logic Gui icon and preview

A preview for every form you save is created (YourFormName.png). If you do a save-all, a complete screenshot is taken and when you do a save-selected, only the selected area is used. The preview allows you easily to find the right form you want to work on. Use the thumbnail view of an explorer window for instance, you can also drop the preview onto the Logic Gui WorkSpace, Logic Gui will insert the corresponding form if exist. If you don't like extra previews, you can switch them off inside the ini file.

5.1.1.10 Save As

Save As gives you two options.

***All** - saves the whole form.*

***Selected** - saves only selected gadgets. Thus you can create your own library of parts. Just Simple ones or very complex ones.*

When saving a partial form -Save As/Selected- you will get a warning if nothing is selected.

Logic Gui saves also the Header, GadgetIni, RawEvent and Append files if they exist and if they are in use, to the new location. Thus it's may easier to keep those files separate for different forms. The paths of the files in the form are adjusted depending if they are absolute or relative. This is probably more useful at the begin designing a new form. When you are somewhere in the middle and you need all your files together (used text, pixmaps, icons, ...) you should use the export function.

5.1.1.11 Create Source

The new source can be directed to different locations.

Save it to a file.

Put it into the clipboard.

Start an editor and load the file. Try it. It should start the MaxIDE if it's still at the default location. If you use another editor you have to change the entry in the ini file.

Set Editor, sets the editor you want to use. Most important after an upgrade of your BlitzMax installation.

Run starts the Blitzmax compiler and shows quickly your form. The BMK.exe (BlitzMax Compiler) is expected at the default path, if not found, Logic Gui will ask you to locate it.

5.1.1.12 Build Options

You can choose:

Debug Build *(default on – to show the debug messages in the Process Output Window),*

Threaded Build *(default off – you need Bmax1.32 and up installed and Logic Gui pointing to the the correct bmk.exe),*

Build Gui App *(default off – thus the created exe will show a console window with your debug messages, if you start it directly without Logic Gui) like in the normal MaxIDE.*

Insert DebugLog *Switch on/off the debug information from Logic Gui inside the source code, thus only your own DebugLogs appear in the process output window when compiling a debug version.*

Insert Identifier *That means Logic Gui will create the source and suppress all :TGadget and other*

identifier if not needed for SuperStrict-ness, when switched off.

Comments *Clear All Comments From Code Output*

Clear Only Private !Comments From Code Output

The first option removes all comments starting with a ' while creating the output code, the comments will of course stay in the original code! This can be used if you heavily commented a code but don't want to give those comments away when distributing the code.

The second option clears/filters only private comments out of the code. A private comment starts by definition with '!

The private comment option helps you to keep normal comments but removes your private stuff.

MaxGui Version *In the next MaxGui Version (1.34) the window gadget will calculate the client area differently. The toolbarheight will then be taken into account, thus the coordinates for window child gadgets need to be adjusted. To decide for which version of MaxGui you want the source code created for, there is this switch 'Use Toolbarheight'. When switched on the toolbarheight will be used to calculate the client area.*

All combinations are possible, thus you can also directly create a release version of your application out of Logic Gui. All Build Options are saved in the ini file and loaded on startup.

Set BMax Version

This entry allows you to change the current BMax version for compiling your form on the fly.

5.1.1.13 Window Setup

When using different monitors you may like to have also different setups for your windows. You can save a window setup and load it later when needed. All windows are saved except the Properties Editor and Event Editor window.

Auto Adjust

Auto Adjust window position can be used if windows are off the screen. This could happen when switching between different computers using the same Logic Gui (by USB Stick or network). It will call back any window back to the primary display, also Properties and Event Editor windows. It can be found under the Window Setup menu or can be initiated by pressing CTRL R when this window is also not reachable.

A key in the ini file allows you to switch the window 'Auto Adjust' on/off during start-up. It is on by default, so any window off the screen will be automatically called back to the primary display. While that would work probably for most users, there are some with dual monitors, they should switch this setting off (set to "0") to allow (tool-) windows on the second display. Unfortunately I can't detect if the secondary display is active, only a virtual display expander or real, thus you need to edit this setting depending on your monitor setup.

5.1.1.14 Print

The print menu offers two destinations, 'To File' and 'To Print'.

Choose a target depending where you want the output directed to.

When you output to a printer, Logic Gui will print your WorkSpace on the default printer via paint (needs to be installed) in the background. Use CTRL-P (while the workspace is active) as shortcut.

5.1.1.15 Quit

Asks for confimation and quits Logic Gui. If not changed in the Options Menu, the form will be saved again when altered since the last save.

5.1.2 (Edit Menu &) Popup Menu

The Edit menu is no longer available, only the pop up menu is used!

5.1.2.1 Undo / Redo

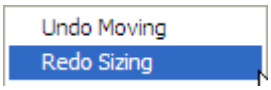


Illustration 3: Undo / Redo Description

Undo and Redo show a small description what step will be undone/redone. Almost all gadget related actions can be undone! Simple actions like select cannot, as it is easy to change. All changes to gadgets done in the Properties Editor can be undone as well, by one simple undo afterwards, be careful if you have more than one Editor open though. There is no limit for undo and redo, only your memory. As shortcuts you have CTRL-Z for undo and CTRL-Y for redo while the workspace is active. If you call back deleted gadgets they will be put back in the workspace, but the order may lost. All other actions which are not gadget related will not produce an entry in the undo buffer!

5.1.2.2 Properties

This opens the Properties Editor. When gadgets are selected they will be put in an extra group for fast access. The same can be achieved by double clicking on a gadget or pressing F4 (WorkSpace active).

5.1.2.3 Convert To

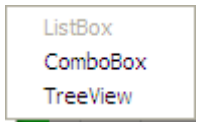


Illustration 4: Convert To menu

This entry is only active when selecting either a TreeView, a ListBox or a ComboBox and allows you to convert the selected (Primary) gadget to any other list based gadget without data loss. Even if you convert to a gadget with less possibilities and save and quit the form, you can get all data back when you later decide to convert to the original gadget type. This is a nice time saver when trying several design variants. Just imagine you choose a ListBox with all items and tips and while defining the look of our application you realize there is not enough space. So now it's only a simple click and the gadget is converted into a space saving ComboBox. All the item data, all the event function code is kept.

5.1.2.4 Align

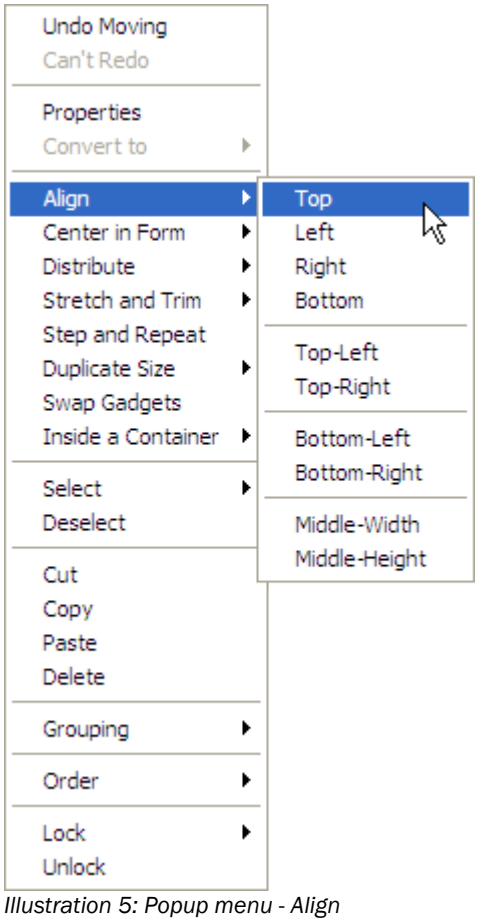


Illustration 5: Popup menu - Align

As an example look at the pictures. The button Button5 and textfield TextField1 are not really at the same level. Instead of moving something by hand leave that to the program which can do it for you much better and quicker. Use the built in Align Function. To reach it ***right click*** *somewhere on your WorkSpace. You will get a popupmenu with a lot of options.*

Choose the method you like most and the gadgets will line up. Remember, all selected items will use the primary gadget (blue frame) as the reference!

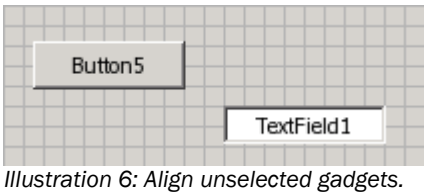


Illustration 6: Align unselected gadgets.

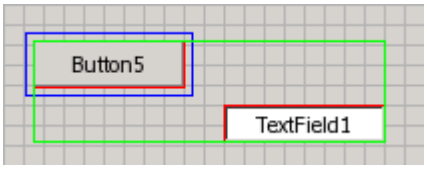


Illustration 7: Align selected gadgets. Button5 is the primary gadget (blue frame)

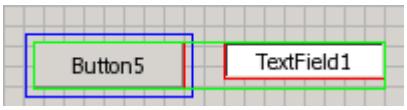


Illustration 8: Align to top.

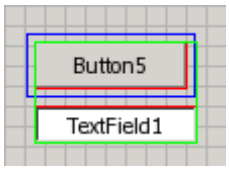


Illustration 9: Align to left.

5.1.2.5 Center in Form

With Center in Form it is possible to center all selected gadgets in width or height or both of the WorkSpace. This could also be useful for instance when gadgets were lost outside the WorkSpace.

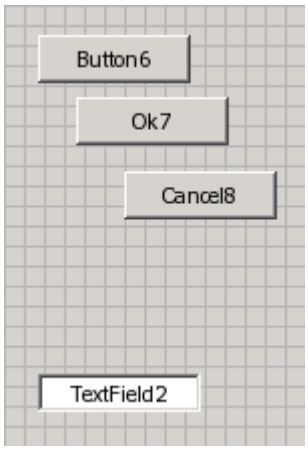


Illustration 10: Before distribute.

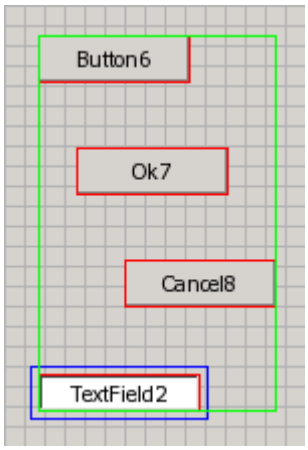


Illustration 11: After distribute.

5.1.2.6 Distribute

Imagine you have a situation where several items needed evenly distributed along a certain distance. Instead of calculating manually what should be the distance, Logic Gui does it for you automatically.

I have taken here four gadgets, it can be more, but at least you need three (you can also use a guide instead of a gadget)! You can distribute horizontal or vertical. In this example we will distribute those four gadgets vertical.

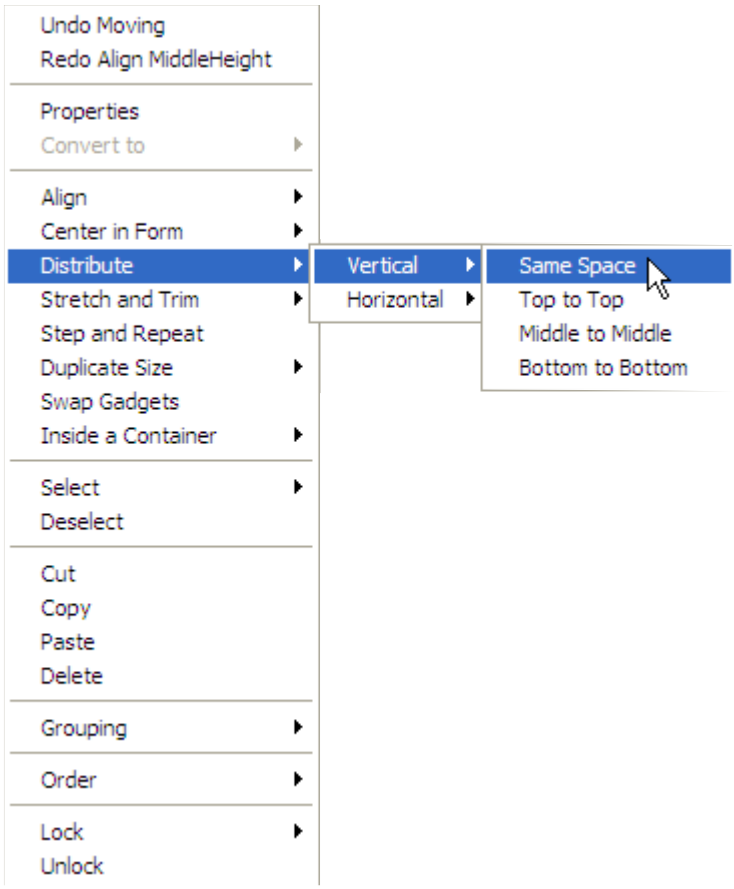


Illustration 13: Popup menu - Distribute

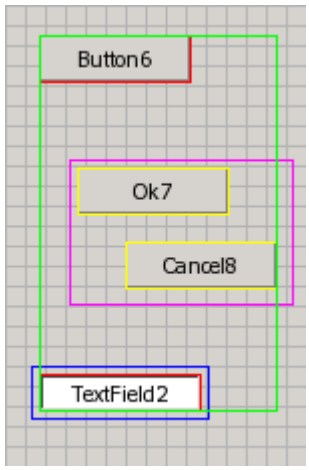


Illustration 12: Distribute a group.

Distribution supports also grouped gadgets. When choosing the automatic distribution of gadgets, Logic Gui will check if you selected a whole group or only single members. Only if the whole group is selected it will be distributed as group otherwise as single gadgets. You can mix single gadgets and/or several groups.

How does it work:

Position the first gadget (or guide) to the most top and the last gadget (or guide) to the bottom. All other selected items will then be distributed between those two!

If we distribute vertical, the horizontal

position isn't touched and vice versa.

On the right you can see how it will look afterwards.

And above you find the popup menu with the different options for distribute. Mainly useful when having items of different sizes.

5.1.2.7 Stretch and Trim

Sometimes you need to justify specific elements. In that case use Stretch and Trim. In the example here we want to stretch the TextField1 to the left edge of the Button5. Select both and take care that the primary gadget (blue frame) is our reference. Now select the Stretch and Trim Function.

Checkout the images.

Logic Gui automatically detects if a Stretch or a Trim is needed!

This works also with several gadgets, all selected gadgets will be trimmed or stretched to the edge you defined.

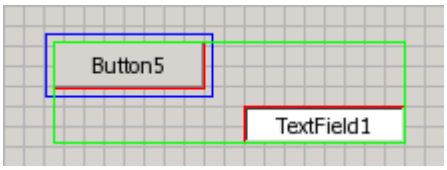


Illustration 14: Strech & Trim - gadgets selected

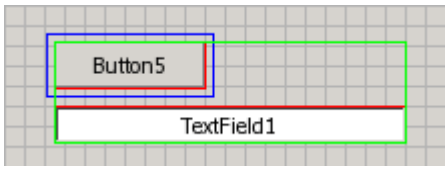


*Illustration 15: Strech & Trim - TextField1 streched to **left** edge.*

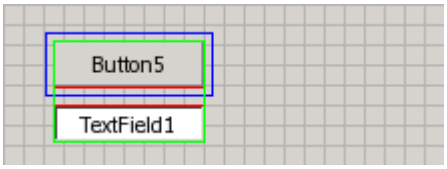


*Illustration 16: Strech & Trim - TextField1 trimmed to **right** edge.*

5.1.2.8 Step & Repeat

Step and Repeat has it's own tool window for better control. This menu entry calls the Step & Repeat Window. For detailed information how this works look at the Step & Repeat tool window explanation.

5.1.2.9 Duplicate Size

Actually you have already the possibilities to duplicate the size of certain elements by using Stretch and Trim or via the Gadget Control Center to as many items you want, but for some more convenience i added this more intuitive way.

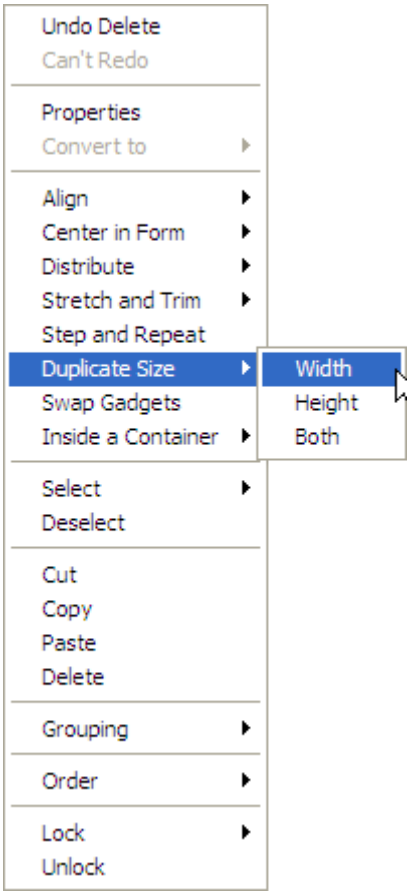


Illustration 19: Popup menu - Duplicate Size

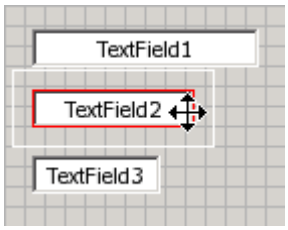


Illustration 18: before Duplicate Size - Width

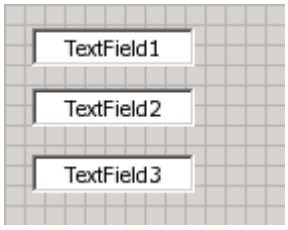


Illustration 17: after Duplicate Size - Width

First select the gadget from which the size should be taken. Then right click somewhere on the workspace and choose Duplicate Size from the popup menu.

In the example above we see that i took the width from the Textfield2. Immediately afterwards the cursor changes it's icon to a "SizeAll".

With this pointer, click on every element which should get the new width!

A slightly transparent blue line or rectangle underneath the cursor shows the copied size as visual feedback!

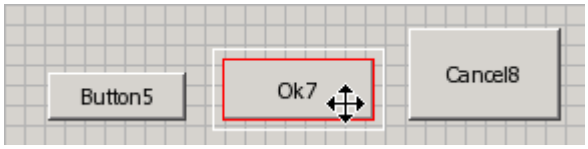


Illustration 20: before Duplicate Size - Height

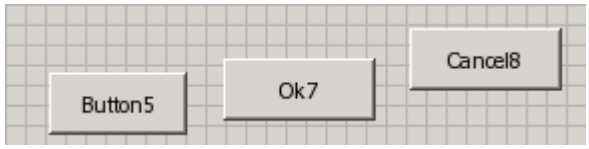


Illustration 21: after Duplicate Size - Height

In the picture above i clicked on button OK7 and chose duplicate height. Button5 and Cancel8 are adjusted accordingly. Notice that the top left corner of the gadgets are not touched and stays the same.

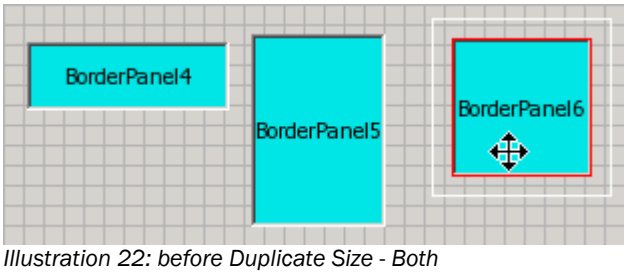


Illustration 22: before Duplicate Size - Both

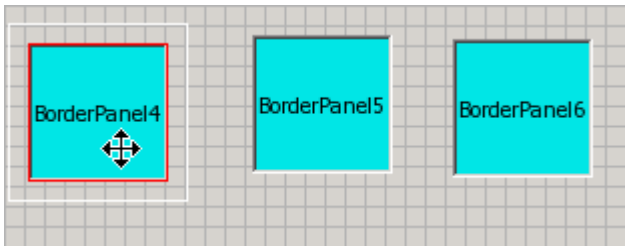


Illustration 23: after Duplicate Size - Both

And lastly the BorderPanel example shows the duplicate both, thus width and height are copied to the other selected gadgets.

The function duplicate both is also available as a one click mode from the toolbar – shortcut CTRL+D (SizeAll icon).

***Note:** Click on a free place on the WorkSpace to stop the duplication or choose another working mode in the toolbar of the gadget tree window.*

5.1.2.10 Swap Gadgets

Swap gadgets let two gadgets swap it's place. Select the first gadget and choose Swap Gadgets from the popup menu. The cursor changes to a hand. Now select the next gadget and immediately it will swap the place with the previous gadget. If the gadgets are in different layers, this information is also swapped.

The swap function is also available in the toolbar (hand icon) of the gadget tree window.

***Note:** Click on a free place on the WorkSpace to stop the swap or choose another working mode in the toolbar of the gadget tree window. The function ends automatically when the swap was done.*

5.1.2.11 Inside a Container - Fit Client Area

Fit Client Area is used to stretch a gadget to it's parent client area. To use this feature you need to move your gadget on top of a container. Click on 'Fit Client Area' and the gadget will be stretched to the biggest possible area of the parent container without clipping your gadget. If this gadget is by chance a container with other gadgets on top, just make it the 'Primary' (blue frame), only that one will be aligned! This is especially useful

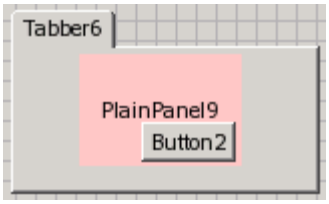


Illustration 24: PlainPanel9 before Fit Client Area

Illustration 25: PlainPanel9 after Fit Client Area

Example here with a tabber and a panel (PlainPanel9) before and after 'Fit Client Area'.

when positioning panels on containers or for HTML View or TextAreas on Splitters, windows, tabbers, groups... As this stretched gadget fills the whole area, you probably want it also resized with the parent, so Logic Gui will set for you the Layout to align automatically to all edges. Makes the alignment very quick and convenient.

This function works with all container gadgets (as parent) except the ScrollPanel, didn't find a good example to what to align here.

5.1.2.12 Inside a Container - Fit Inside Guides

Whenever a gadget should cover all the space between guides, you can use the 'Fit Inside Guides' function to stretch the selected gadget (primary only) to the maximum available space. If there is no guide before the end of the WorkSpace, the edge of the WorkSpace is the border!

5.1.2.13 Set

Variable Type:

This should allow you to easily change all or selected gadgets to a certain variable type. Every action can be undone if needed.

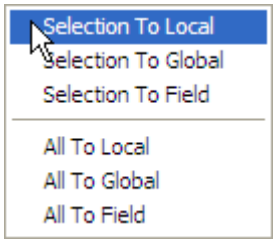


Illustration 26: Set - Variable type

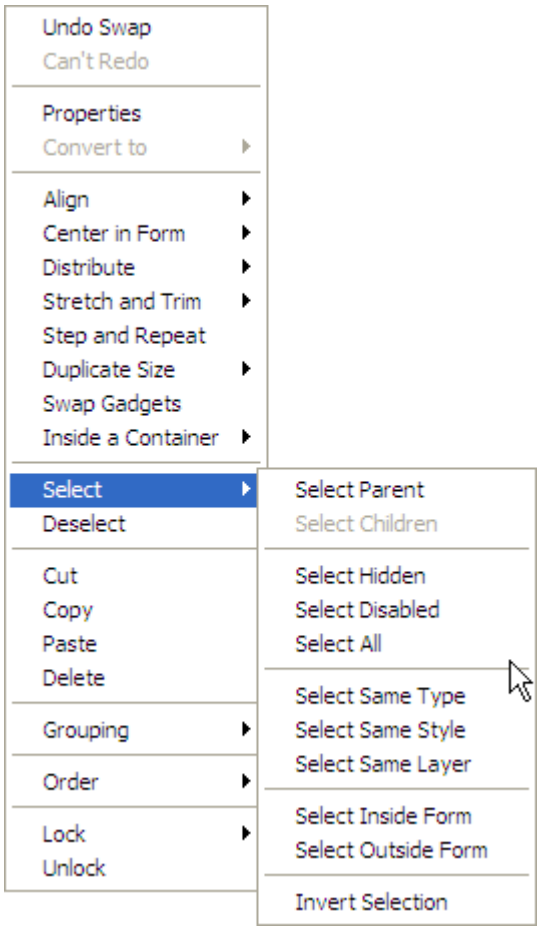


Illustration 27: Popup menu - Select

5.1.2.14 Select

As you can imagine the selection of the right elements are a fundamental thing. To make your live easier use the select function, available when right clicking on the workspace. This function selects only gadgets on the WorkSpace.

Select Parent:

This is especially useful when there are several panels on top of each other and you can't easy pick one in the background. Now you can select just one child on top and go backwards with every 'Select Parent'. That should be much faster than searching the parent in the Source Properties Editor. CTRL PageUp is the shortcut for it. The Gadget Control Center is automatically updated and ready to change the values of the selected parent.

Select Children:

If the selected gadget is a parent of child gadgets, they will be selected. CTRL PageDown is the shortcut for it.

Select Hidden:

This will address all gadgets which have the hidden attribute set.

Select Disabled:

This will address all gadgets which have the disabled attribute set.

Select All:

Selects all gadgets on the WorkSpace.

Same Type:

If a button is selected, it selects all sort of buttons.

Same Style:

If a radio button is selected, it selects only all other radio buttons.

Same Layer:

Selects all gadgets from the same layer. Again only visible gadgets (for gadgets on an invisible tab or scrolled away on a ScrollPanel i prohibit any action!).

Select Inside Form:

Selects everything visible in the WorkSpace

Select Outside Form:

Selects everything on top of the WorkSpace but not visible because outside the window.

Invert Selection:

Whatever is selected will be deselected and vice versa.

5.1.2.15 Deselect

Deselect will drop the current primary gadget from your selection. (Same as shift click that gadget, just without keyboard). To deselect all gadgets you can use also ESC as shortcut.

5.1.2.16 Cut

Cuts all selected elements and holds them in a temporary buffer (Shortcut CTRL-X).

5.1.2.17 Copy

Copies all selected gadgets and puts them **immediately** *into the workspace again. You can then move them to the correct place. Copy does not put anything in the buffer!*

Copy takes all options with the gadget, if it's a window with menu and toolbar, the new window will have it as well! (Shortcut CTRL-C)

Copy gives the new gadget the same name like the old gadget and additional a "_CurrentNumber" string at the end. Thus you can identify which gadget was the source and there is no conflict with double names. The text of the gadget is copied without change to the new gadget. Rename both to your needs.

When copying a bunch of gadgets and some of them belonged to a group, the copy of those new gadgets will grouped together as well. If your selection consists of several single gadgets and several groups, the copy will be the same structure, which allows you to easily combine groups or build new ones.

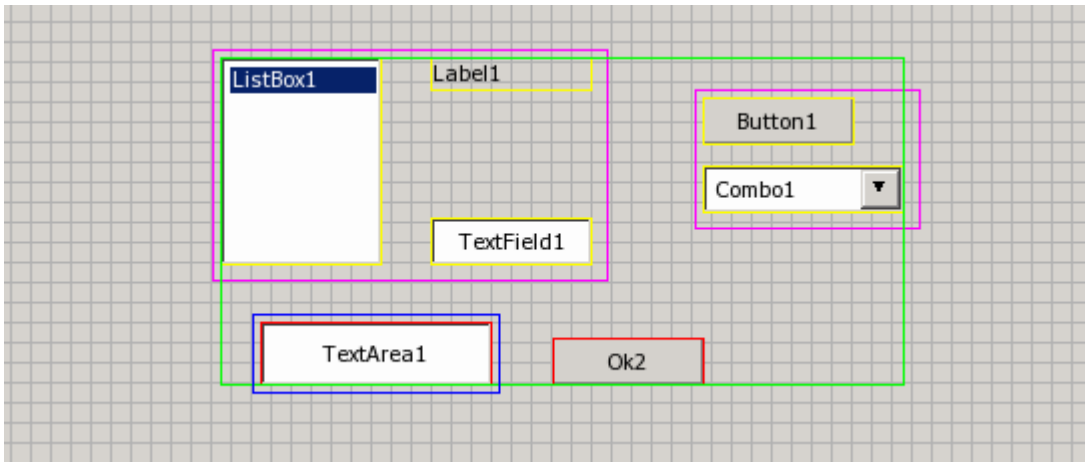


Illustration 28: Copy - Select some single gadgets and some groups.

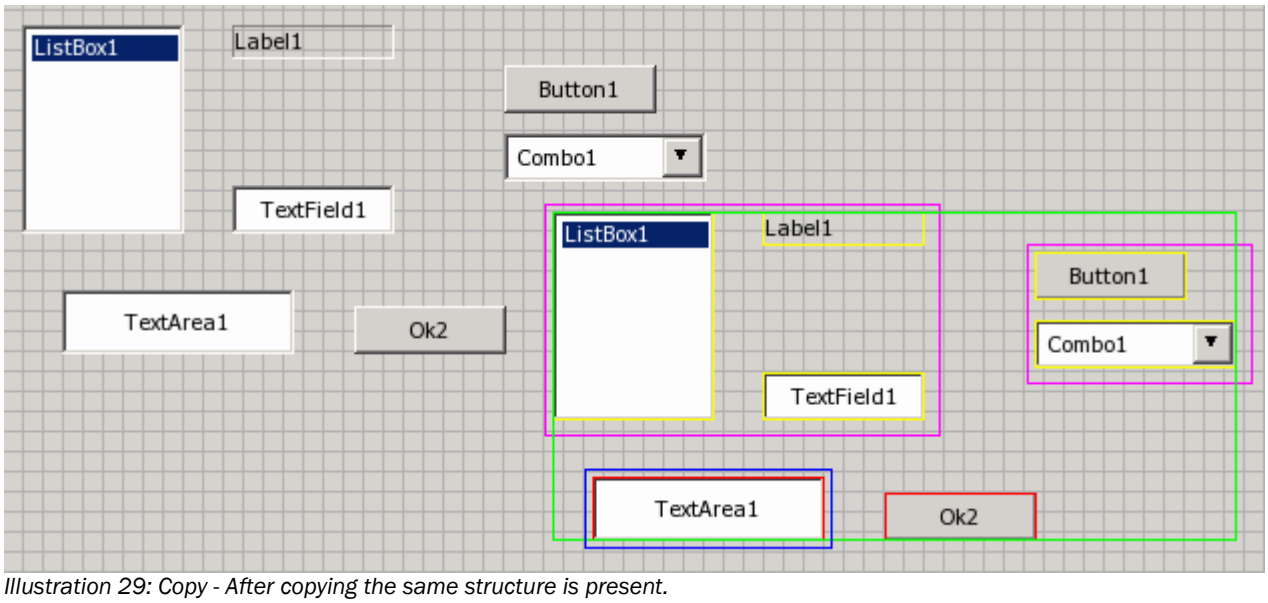


Illustration 29: Copy - After copying the same structure is present.

5.1.2.18 Paste

Paste the temporary buffer back to the WorkSpace. The pointer becomes again a cross (like if you add a new item) – (Shortcut CTRL-V). The paste buffer can be resized (single gadgets only, multiple gadgets are resized via there selection after paste to have full visual control) on the fly. Layers are taken into account during paste.

It is also possible to paste an image from the clipboard to the WorkSpace. Use CTRL+V or 'Paste' from the popupmenu and the cursor will switch to a cross as normal. Click on the gadget you want to paste the image to, or click on the WorkSpace background to create a new Image-Gadget with the chosen image as content. As the clipboard holds only some temporary content the image is saved as file with the name of the gadget you chose in the form directory (png format). Not every image format stored in the clipboard can be converted to a pixmap and pasted, try out if it works with your application!

5.1.2.19 Delete

Deletes all selected items. (Shortcut Del or Backspace)

5.1.2.20 Grouping

Grouping gadgets together.

Select all gadgets which should be taken into the new group using the Multi-Select functions.

Group:

Right click somewhere on the workspace and choose Group. You have now created a new group. There is no limit in how many groups you can create. Every group can be easily recognized by a purple frame around. Any selected group member can be recognized by a yellow frame.

If you select one group member, the whole group is selected. If you don't want your next action happen to all members just cancel the selection of those who are not needed with shift-click. This way you are not forced to group and ungroup elements all the time if you need to change single members.

***Note:** Members can belong to one group only.*

Add to Group:

Choose your group by clicking on a group member and shift click to select some more gadgets and click on "Add to Group" to bring them all together in one group.

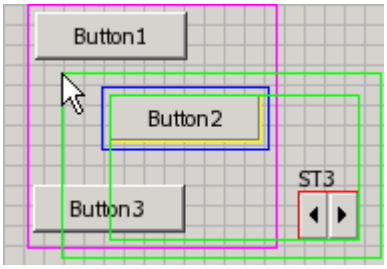


Illustration 30: Grouping - partly selection

Exit from Group:

Select your group and choose "Exit from Group" and the Primary Gadget will leave the group.

Look at the picture to the left. While creating a new Multi-Selection via a selection frame, you will be immediately notified by a purple frame, it you catched a group member.

It's up to your choice if you do your next action only to those two items, or if you want to select whole group.

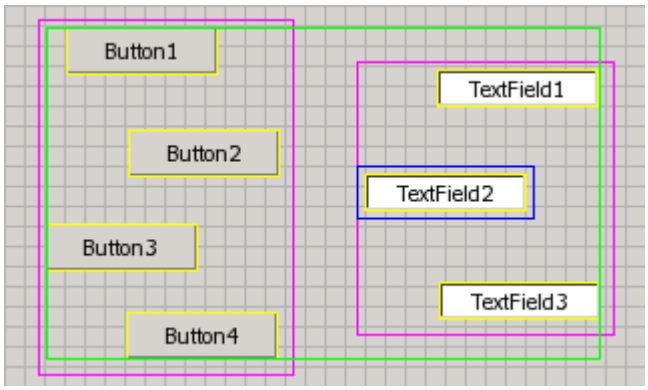
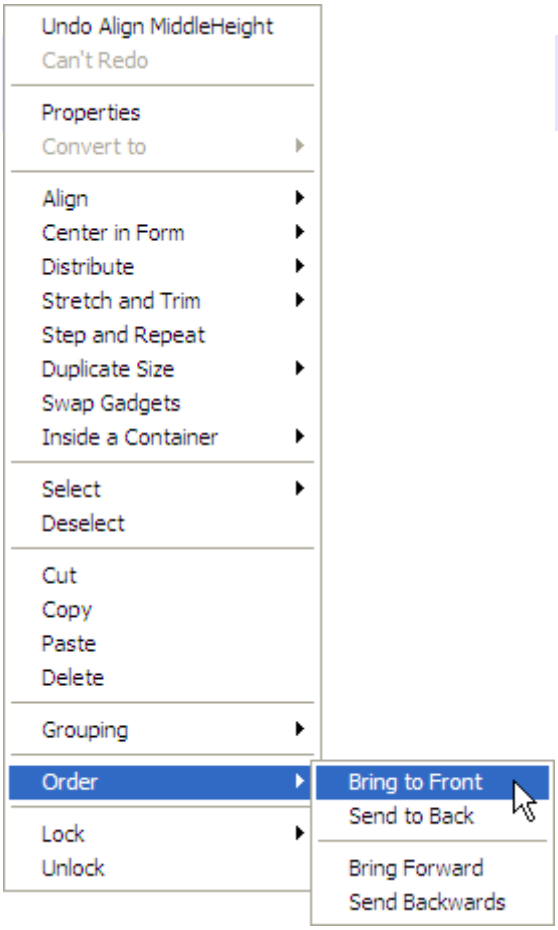


Illustration 31: Grouping - group align

In the last example i show how align works with groups. To be maximum flexible i decided to stay with the concept of my primary element. In the picture to the left, i have aligned two groups. The group who holds the primary will stay, all other will move (align) to what you want.

You are able to align to every single object which is selected as primary gadget. Here i aligned the left group middle height to the Textfield2. Try out other combinations to see how it works



Note: *Group and Ungroup for a selection of gadgets are also available as Quick Access Icons in the Gadget Control Center.*

Illustration 32: Group / Ungroup - Quick Access Icons.

5.1.2.21 Order - Bring to Front / Send to Back

As you may already noticed when moving gadgets around, there is some sort of layering between the different elements. And it becomes important when working with container gadgets and nested items. Actually you should not overlap any other gadgets as it gives bad code and strange behavior. For your convenience every container gadget will be automatically send back, because it should not on top of "normal" gadgets. But sometimes you have to decide which panel is may nested in another panel. You can do so by selecting the specific gadget and choose "Send to

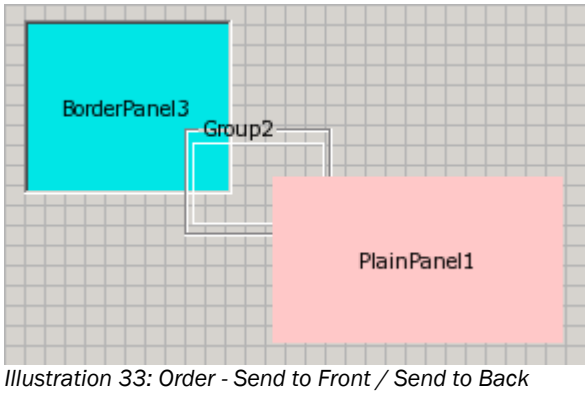


Illustration 33: Order - Send to Front / Send to Back

Back" from the popup menu.

In the picture here you can see, three different types of panels. The Group panel is on top of the BorderPanel and underneath the PlainPanel. If the Group Panel should be put on top of the PlainPanel we need to "Send it to Front" or the PlainPanel to "Back". If you have the choice it's always better to use the "Send to Back" option to container gadgets and the "Send to Front" to normal items.

You can see here also one other good thing. The Design Range is always on top and lets you easily decide if something fits or not, even if it's hidden.

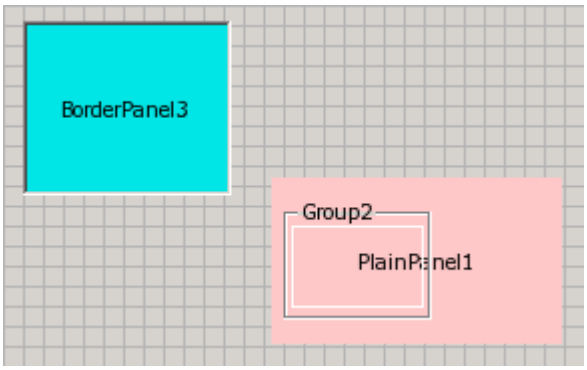


Illustration 34: Order - Panel1 send to back.

As you can see now, i have send the PlainPanel to the "Back" and moved the Group on top.

This is especially important when creating the source, because by only moving something inside a container gadget it is bound to it and the source will be created accordingly. You do not have to do any extra work, just move it in or out and Logic Gui detects what you want.

There is no limit from Logic Gui in nesting gadgets in gadgets...

Illustration 35: Order - Quick Access Icons

***Note:** Bring to Front and Send to Back for single gadgets are also available as Quick Access Icon in the Gadget Control Center.*

To be more precise in shuffling the gadgets around, you can use "Bring Forward" and "Send Backward" from the Order Menu. This will move (only the selected Primary gadget) one step forward or backward in the order.

5.1.2.22 Locking

Why locking? As you probably know it's very easy to move gadgets around, for sure i assume that you don't make mistakes like me, but nevertheless you may like also the idea to lock items in size or position.

As the name already implies, lock size don't let you change the size until unlocked and lock position don't let you move the gadget until unlocked.

Illustration 37: Locking - single gadget unlocked.

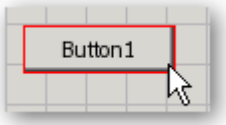


Illustration 36: Locking - gadget position locked.

Illustration 38: Locking - single gadget locked.

If you lock a gadget with "Lock Size" the mouse pointer does not change it's icon anymore when close to the gadget border!

If you select only one item you will see it's lock status in the Gadget Control Center.

*You can even click on the lock to change it's status, but it does a full lock only (size **and** position).*

5.1.2.23 Unlock

Unlock switches off the lock for size and position of all selected gadgets.

You can use also the Quick Access Icons to unlock all selected gadgets.

5.1.3 View Menu

5.1.3.1 Form PreView

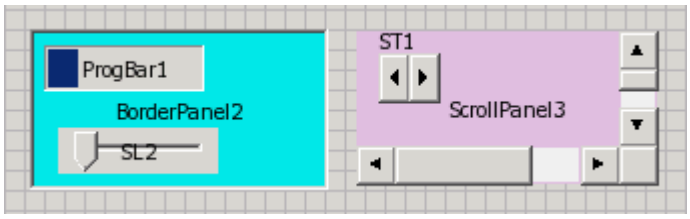


Illustration 39: Form PreView - off.

All the panels have a certain color, this is of course only done to immediately recognize where are the borders and to have enough contrast. Also every gadget in the form is identified by it's name even when there is no label afterwards. The quick preview switches all colors back to standard and the names not used off (and hides the grid if active). Thus you will get a good idea how it will look without compiling the form. While the form is active you can also press the space bar as hotkey for this function. The actual state is saved on exit.

5.1.3.2 Gadgets

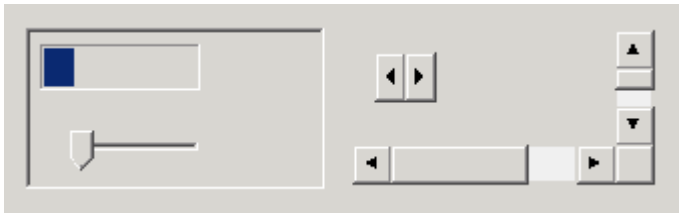


Illustration 40: Form PreView - on.

Switch on or off the gadget to gadget snap for fast visual alignment (separately for moving and sizing – see also guide snap and grid snap), or how to display the gadget design range.

Design Range (Single Gadgets)

So what is it, this magic Design Range?

It's a quite nice feature. This Range, counted in pixel, creates a white frame around the gadget. You can easily see if you have the correct distance to other objects! That's nice but wouldn't be so great if you couldn't change it on the fly. You do so by using the mouse wheel. While changing the range it's shown on the screen and even negative values are allowed. This way you could also see if items in a container are all have the same distance from the container border. Try it. You probably don't want to work without anymore.

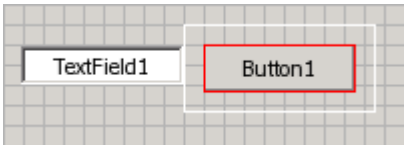


Illustration 42: Design Range - Outside a button.

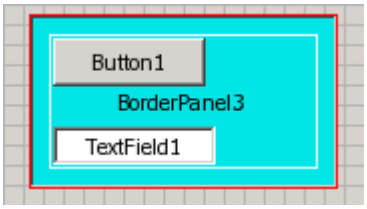


Illustration 41: Design Range - Inside a panel.

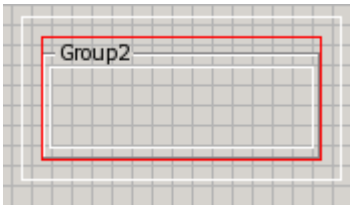


Illustration 43: Design Range - Group Panel

For the Group Panel i even insert a second Design Range which sits inside the group and should show at which distance the active part starts. That means if you put a gadget inside such a group panel and you are too close and touch the border, some pixel of your gadget are cut which doesn't look nice, so the inner Design Range should help you there.

5.1.3.3 Design Range (Multiple Gadgets)

A second menu entry can be found underneath the Design Range menu "Multiple Gadgets". By default this entry is switched off, but when switched on, it shows the design range for the primary gadget in a multiple gadget selection. This could be useful when you want to align visually a whole group using one gadget as reference.

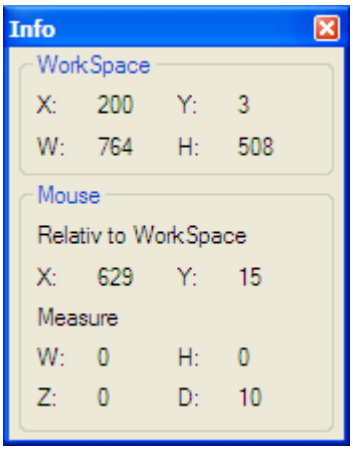


Illustration 44: Design Range - Info display -> D = 10 pixel

5.1.3.4 Guides

Snap while moving:

When moving gadgets close enough to a guide the gadget will snap automatically, if 'Snap while moving' is enabled.

Snap while sizing:

When enabled in the menu 'Snap while sizing', you can snap your gadget also during resizing.

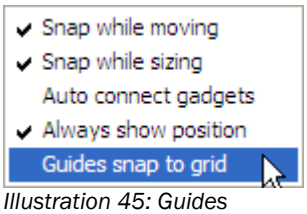


Illustration 45: Guides

Note: *If you snap while sizing or while moving, you can do so also with several gadgets (multiple selection), the whole group is adjusted with the primary gadget as reference. Snap to guides works in all directions.*

Auto connect gadgets:

Press CTRL and click on a guide to select all snapped gadgets in one go and move it to the new position, parents will select also it's children. You can switch this behavior also permanent on when choosing 'Auto connect gadgets'.

Always show position:

Turns on the position flag of a guide all the time and not only during moving.

Guides snap to grid:

Guides can snap also to the grid while gadgets don't have to. You can still move your guides in steps of the grid, while your gadgets are freely movable and snap only to the guides where necessary.

5.1.3.5 Fontsize

Logic Gui uses during drawing the standard 96dpi font size for the system text as default. You can change your font size to better fit high resolution displays. 96, 120 and 144 dpi are available. You can also specify a custom font if needed, via the ini file. The ini file contains a xml node:

CustomFont1 Font="verdana.TTF" FontSize="11" Display="Custom Font: Verdana 11pt - 96dpi"/

Define the font you like to use and the font size as shown in the example above. The 'Display' string will be visible in the menu structure to identify your chosen font.

When you search for a nice font, please note that the name shown in the font directory of windows is NOT the filename of the font! Use right click and properties to get the real filename!

Logic Gui searches in the %Windows%/fonts directory for the new font, so you only have to define the name and extension.

When the font is not found there, Logic Gui looks in it's own directory. Thus you can drop fonts in there or in a subdirectory. Look at the example below:

CustomFont1 Font="Fonts\almosnow.ttf" FontSize="36" Display="Custom Font: almosnow 36pt – 96dpi"/

Font="Fonts\almosnow.ttf", does mean it looks for the font in a Subdirectory Fonts in the Logic Gui application folder.

FontSize="36", does mean the 36 pixel size should be loaded.

Display="Custom Font: almosnow 36pt – 96dpi", should be displayed in the menu. Although the 36 pixel font is a quite big one, it should here still be used as 96dpi font, because it's a normal font but used for decoration. Anyway, the text is only used as a reminder for yourself.

Please keep in mind, that the font size chosen has no effect to the gadget, it's only to visually adjust the size and position of your gadgets for different user dpi settings of their display.

5.1.3.6 Process Output

There are two entries in this menu. 'Open Process Output Window On Run' and 'Close Process Output Window On Stop'.

The first one opens the Process Output Window when using RUN, but it is also possible to suppress the output window. The second option is useful when you are using Logic Gui in fullscreen mode and the Process Output Window does hide your form after you stop the run mode. If both options are switched on, it is possible to get all infos during testing from your application as the Process Output Window pops up on run and closes immediately after stopping it, giving access to your form again.

The current state is saved and loaded as usual.

5.1.3.7 Draw Lines during sizing

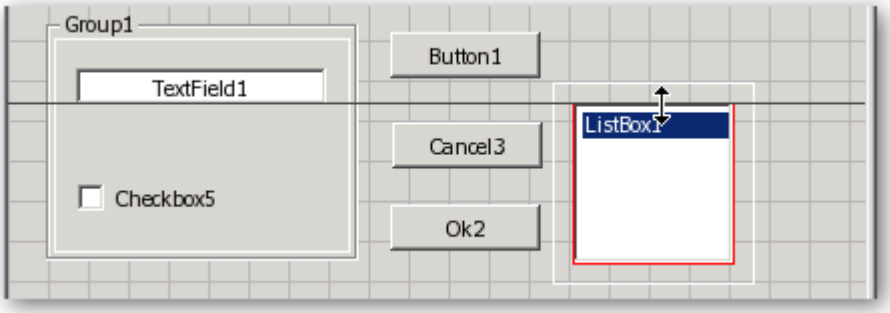


Illustration 46: Draw Lines during sizing

If this function is enabled, you will get an help-line drawn at the gadget you just resize. It's available for all directions.

If you match any other gadget edge while sizing, the line color will change from dark grey to red, thus you can work quicker as you immediately recognize when you are at the same position.

For those who don't like numbers, can now size the gadget and visual align to anything useful. The actual state is saved to the ini file during quit.

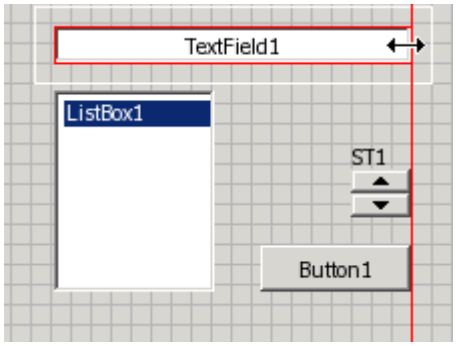


Illustration 47: Draw Lines during sizing - match a edge.

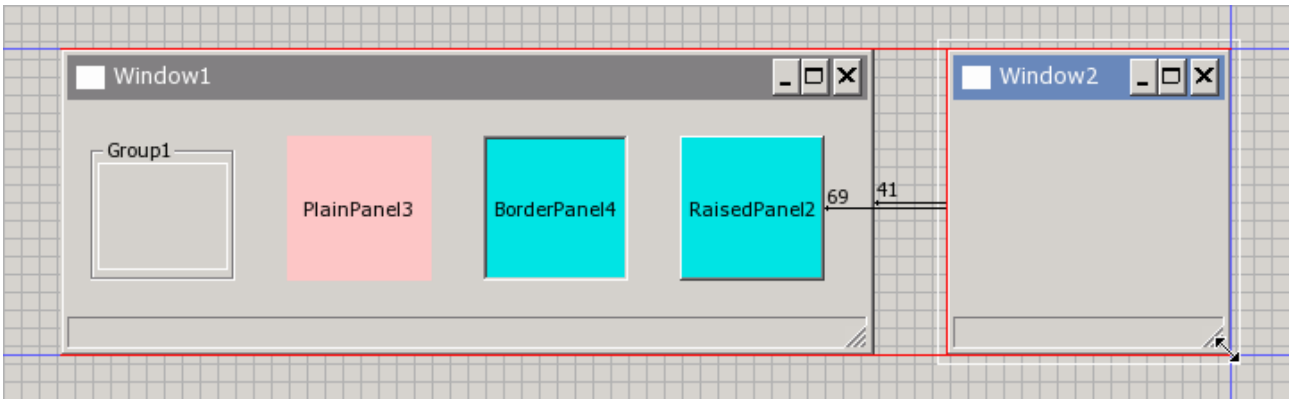


Illustration 48: Draw lines during sizing - Several machtes while diagonal sizing.

5.1.3.8 Draw Lines during move

When you move a single item Logic Gui can draw lines for better alignment. You can switch this on or off via the view menu and the last state will be saved to the ini file for the next session.

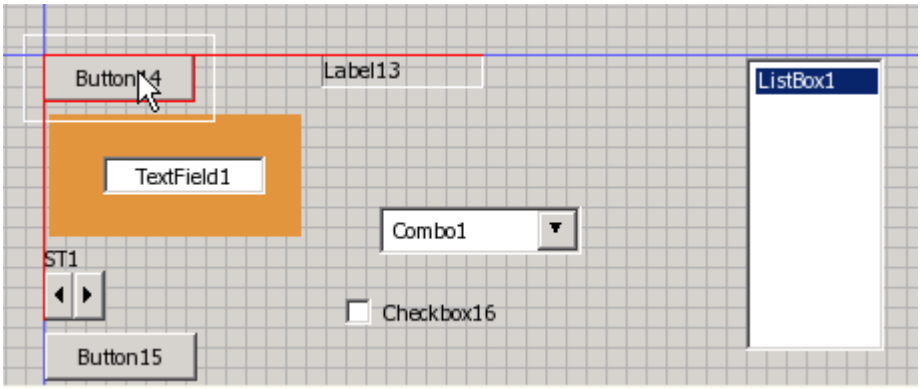


Illustration 49: Draw Lines during move - two sides do match.

Visual feedback is also available. Every side is compared and drawn in red if it matches any other gadget edge/side. This way you could move and position your gadget easy to e.g. two other edges.

The red line shows only that long as the item is away which matches. Thus you can better see which item is meant when several gadget edges are close together.

5.1.3.9 Visual feedback

When switched on, visual feedback is given although the "Draw lines during sizing" or "during move" is off, that means every equal position as another gadget results in red lines. If all the lines on the screen were too much, they will now only appear if there is a match. Only gadgets outside the selection will be detected for a match!

5.1.3.10 Visual Distance

A new way to look at the distance between your primary gadget and the rest of the form. The current state will be saved in the ini file. The visual distance is updated on the fly while moving the gadget. You see

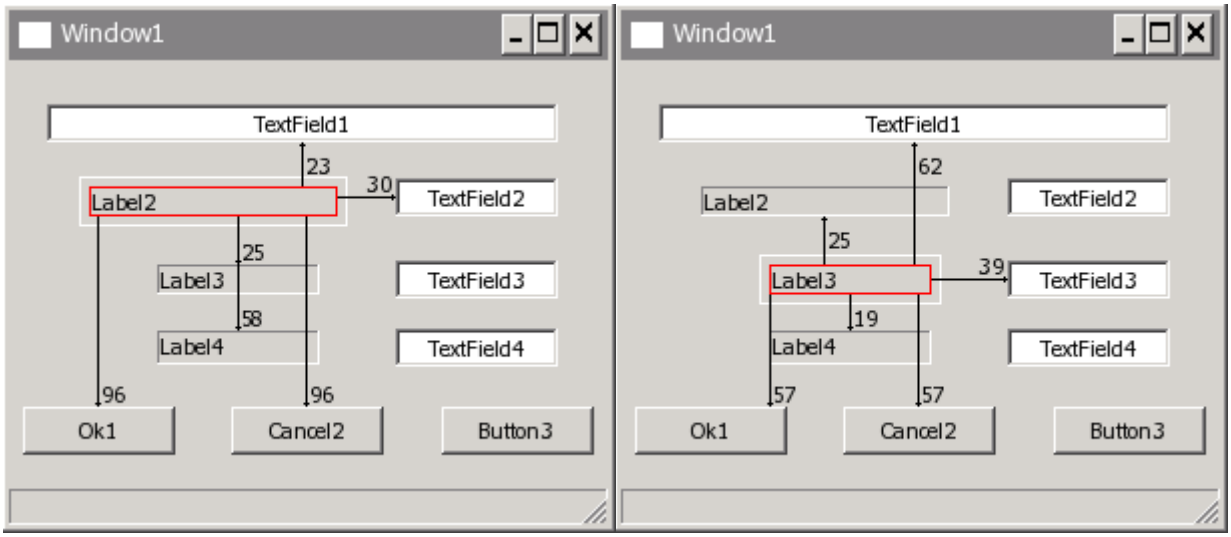


Illustration 50: Visual Distance

directly where you are all the time. Only horizontal or vertical neighbors are taken into account. When gadgets are too far away a clipping value stops showing too much lines. The internal default value for clipping is 100 pixel and can be changed in the ini file or switched on/off in the menu.

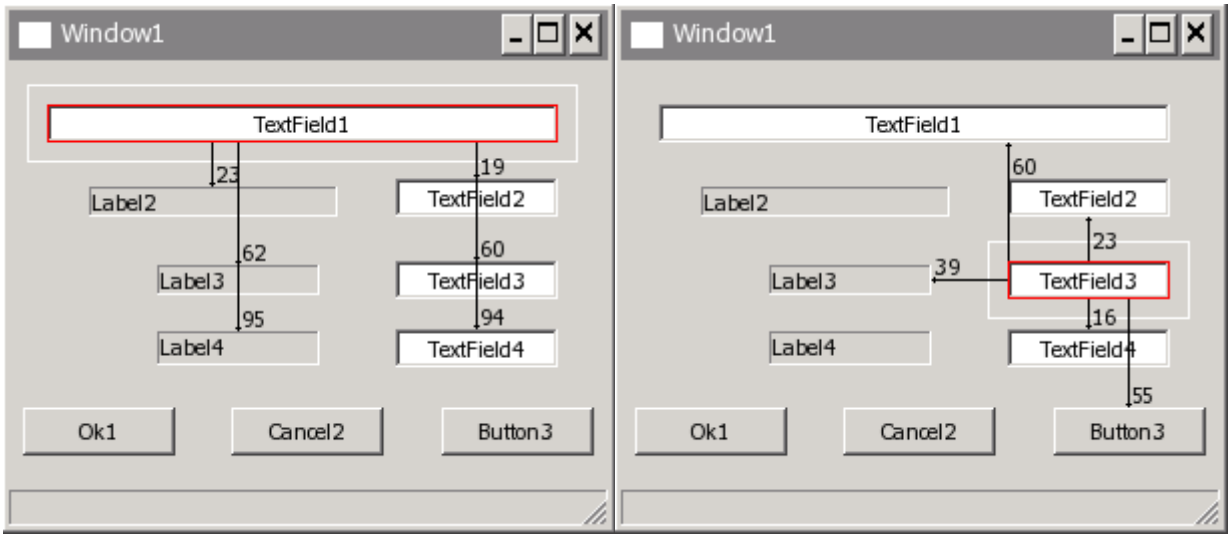


Illustration 51: Visual Distance

5.1.3.11 Step in GridSize

As you know you can move/size a gadget precise 1 pixel by hitting one of the arrow keys and 5 pixel when pressing also shift. When "Step in GridSize" is enabled you can now move/size a gadget in steps of the chosen grid size. This changes only the step size when the modifier shift is pressed! If the grid spacing is different between x and y this is also taken into account. You can for instance use the snap function to position your gadget and afterwards step the gadget with this new feature to any other position but still aligned to the grid. The status of the menu entry will be stored in the ini file and read in again next start of Logic Gui.

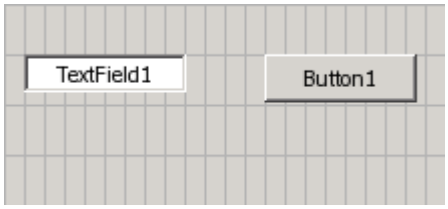


Illustration 52: Step in GridSize - start position.

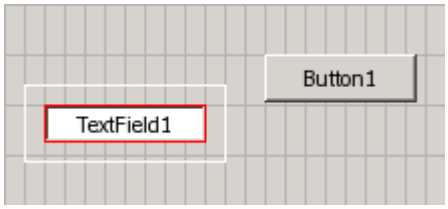


Illustration 53: Step in GridSize - one step to right and one step down.

5.1.3.12 Select container select children

When you select a container gadget like a window or panel, then all children inside will be selected as well, when this option is turned on. This is useful and easy for move, size and other actions on your gadgets. When you turn this off, you either have to select gadgets yourself or use for example the anchor feature to connect your children to the parent and they will move and size accordingly.

5.1.3.13 Show All Tool Windows

Opens all available tool windows in one go.

5.1.3.14 Hide All Tool Windows

Hides all visible tool windows.

***Note:** Check out also the shortcut CTRL-T to toggle the current visible tool windows on or off which covering the WorkSpace. This gives you a fast way to access the gadgets on the WorkSpace may hidden underneath a tool window.*

5.1.3.15 Info Window

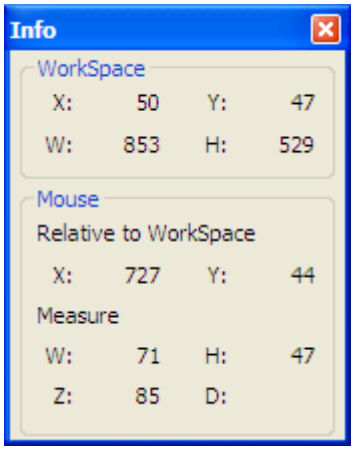


Illustration 54: Info window.

Opens the Info window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.16 Step & Repeat

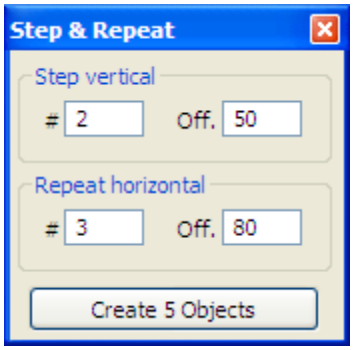


Illustration 55: Step & Repeat window.

Opens the Step & Repeat window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.17 Grid Window

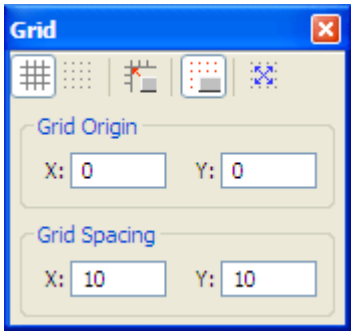


Illustration 56: Grid window

Opens the Grid window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.18 Gadget Control Center

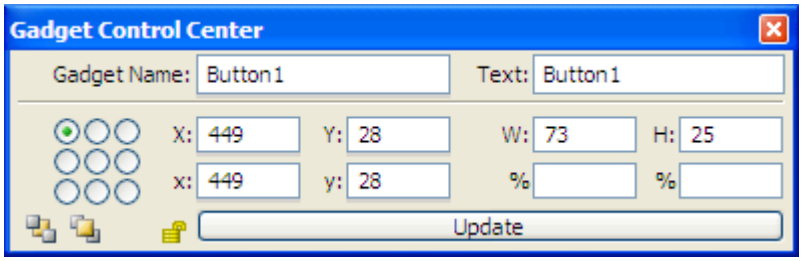


Illustration 57: Gadget Control Center

Opens the Gadget Control Center window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.19 Magnifier Window

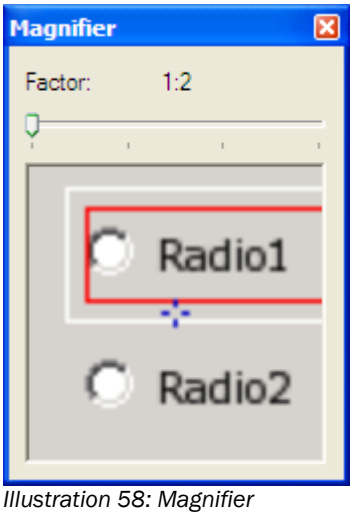


Illustration 58: Magnifier

Opens the Magnifier window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.20 Process Output Window

Opens the Process Output window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

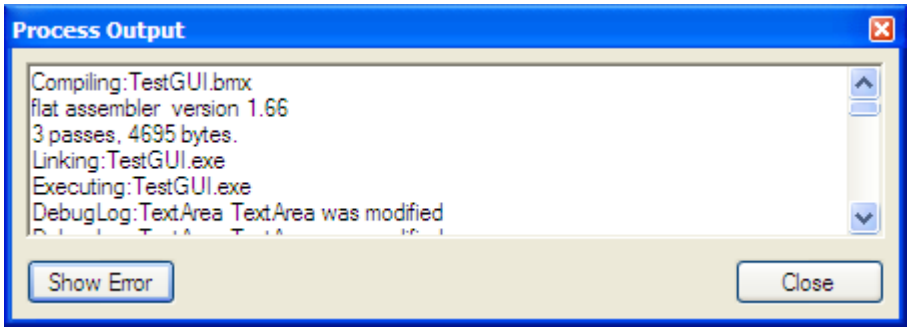


Illustration 59: Process Output

5.1.3.21 Layer Window

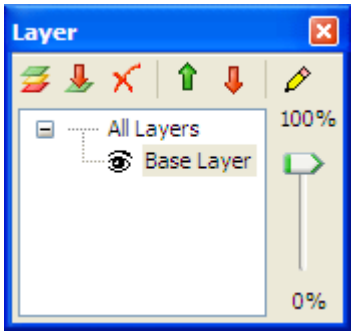


Illustration 60: Layer

Opens the Layer window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.22 Language Window

Opens the Language window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

Illustration 61: Language

5.1.3.23 Layout Window

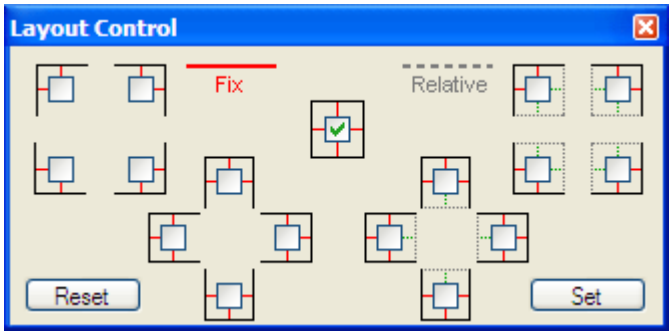


Illustration 62: Layout Control

Opens the Layout window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.24 Manager Window

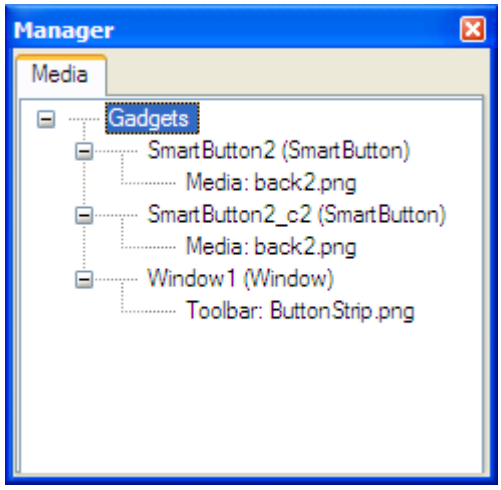


Illustration 63: Manager

Opens the Manager window.

Detailed information can be found in the Tool Window Chapter.

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.25 Anchor Window

Opens the Anchor window.

Detailed information can be found in the Tool Window Chapter.

Illustration 64: Anchor Window

The menu entry shows a checkmark if the window is already open. The state of a window is saved on exit and restored on startup.

If the tool window should be visible, but is hidden underneath other tool windows, it will be moved on top of all other windows when you choose this menu entry.

5.1.3.26 Menu Control Center Window

Opens the Menu Control Center window.

Detailed information can be found in the Tool Window Chapter.

5.1.4 Option Menu

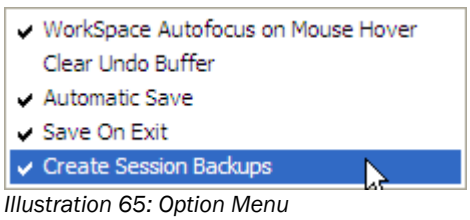


Illustration 65: Option Menu

5.1.4.1 WorkSpace Autofocus

Whenever a gadget is selected on the WorkSpace, the focus to the WorkSpace is automatically caught when the mouse enters the WorkSpace. This is done to have all shortcuts immediately working without extra clicks.

This menu entry allows you to turn the auto focus off, because it steals the focus also from a toolwindow and resets the values to the current values of the selected gadget when the mouse enters the WorkSpace. Set as

you like, the default is on.

5.1.4.2 Clear Undo Buffer

Clears the undo buffer to free some memory.

5.1.4.3 Automatic Save

Logic Gui saves your form regularly based on this AutoSave option.

5.1.4.4 Save On Exit

Saves the form when exiting Logic Gui. When you quit Logic Gui you will be asked if you want to save the current form if 'Save On Exit' is disabled and the form was changed.

5.1.4.5 Create Session Backups

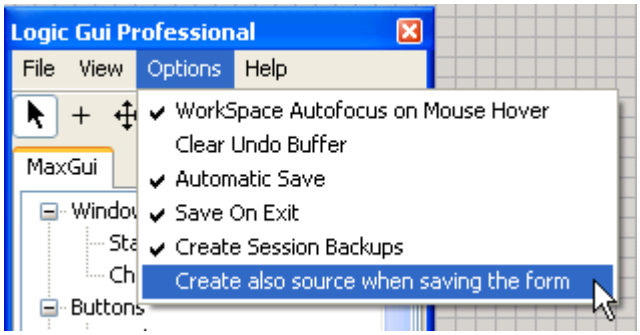
To be able to decide whether you want to have additional session backups created of your form or not. When enabled (default) a backup of your form will be created before loading (up to 3), otherwise not. Form files with the ending .old .older .oldest are created.

5.1.4.6 Create also source when saving the form

Default is off.

When selected and you save your form (.LG file) Logic Gui also writes an .bmx source file out of the current form. This could help to have the .bmx file also open in an editor for debugging without contantly using "Create Source to file..."

The .bmx file will not be written when an autosave takes place or when using Save All or Save Selected, only a normal save (or CTRL-S) does trigger!



5.1.5 Help Menu

5.1.5.1 About Window

The About window shows your current Logic Gui version and build number. At least the exact build number is very important if you ask for support.

You find also your registration number and to whom it was licensed (person and/or company) in this window.

The Check for Updates button opens your system browser and links to www.LogicZone.de. The latest version is normally stated on the Logic Gui home page or on the download page.

The Eula button opens the end-user license agreement.

5.1.5.2 Logic Gui Homepage

Opens a browser directly pointing to the Logic Gui homepage.

5.1.5.3 LogicZone Support Forum

Opens a browser pointing to the LogicZone Support Forum. Here you can ask questions, report bugs, request features...

5.1.5.4 Online User Manual

Opens a browser pointing to the latest user manual. Be aware that it needs the acrobat reader installed to display it. This makes of course only sense for people who have a fast and cheap Internet connection.

5.1.5.5 Shortcut Table

Opens a browser pointing to a page which shows all the available shortcuts in your current Logic Gui version.

5.2 Toolbar

The toolbar in the Gadget Tree Window is there to choose a working mode and to see which one is selected. Additional you can start compile and stop your form.

There are following modes:

Illustration 66: Gadget Tree Window - Toolbar.

5.2.1 Move and Size

This is the default mode. In this mode you can move and size your gadgets. When you double click a gadget in the gadget tree to add another one, the mode is temporary switch to the insert mode and after adding it will switch automatically back into this Move and Size mode. If you like to stop the insert mode in between, just click on this Move and Size mode again and the insert will be cancelled.

5.2.2 Insert New Gadgets

If you choose this mode, a new gadget will be added. The cursor will change it's type into a cross to help you positioning the new gadget. The type of the gadget is the last known type ever added to the form, if no gadget was inserted since you started the current form a button is the default type.

This mode is also entered when you double click a gadget in the treeview.

5.2.3 Duplicate Height and Width

This mode can only be entered if a gadget is selected! The pointer changes in a SizeAll cursor. The height and the width of the first gadget is copied to the next gadget(s) selected. Stop duplication with a click on the WorkSpace or change to another mode. There is a slightly transparent blue line or rectangle underneath the cursor to show the copied size as visual feedback.

To duplicate only the height or only the width, use the menu entry from the popup menu.

5.2.4 Swap Gadgets

This mode can only be entered if a gadget is selected! The pointer changes in a hand cursor. The selected gadget will swap it's place with the next selected gadget. After that, the default mode is entered automatically. The top left corner of the gadgets will stay the same. Layer and order is taken into account.

5.2.5 Measure

When you enter the measure mode, no gadget can be selected. The pointer changes to a cross for precise measurement.

After measure you can immediately go on working with the current selection. If the info window was hidden then it pops up to

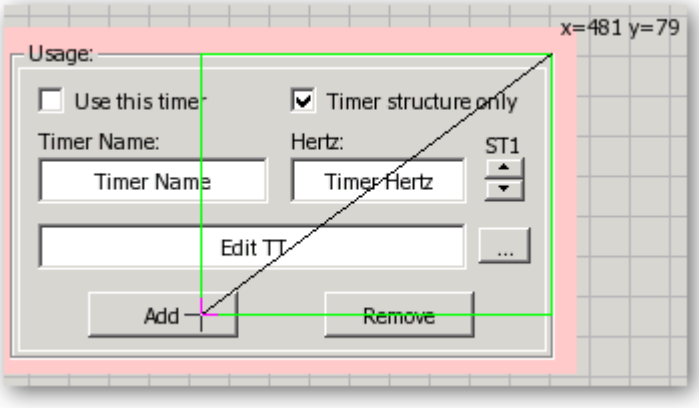


Illustration 67: Gadget Tree Window - Measure.

show the measured values.

A green frame and black direct line is drawn as reference. The starting point is marked also with the starting coordinates x,y.

In the Measure section of Info window,

W: = width, H: = height, Z:= diagonal

Test your Form:

5.2.6 Run

To test your form, you can do a debug compile directly from Logic Gui. The Process Output Window will popup if not yet open, to show the compilation process and the debug output.

You will get a notification if you start a new test run of your form, while there is still one running in the background. Choose between OK to abort that and start your new test or CANCEL to return to the form and leave the old test running.

The run shortcut is F5 (when form is active)

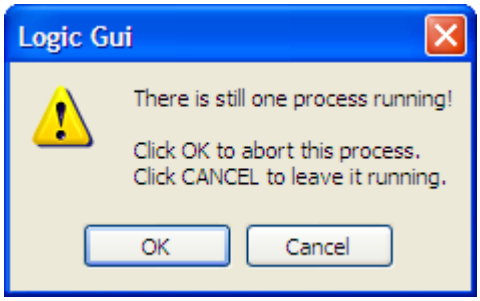


Illustration 68: Gadget Tree Window - Run.

5.2.7 Stop

Depending on your test form, you can normally end the form in itself (preferred), but sometimes this is not possible – a possible hang or no end condition. You should use the Stop icon then (wherever applicable). It will kill the process and return control to Logic Gui. This is far better than killing the process with the Windows TaskManager.

5.2.8 PostProcessing

This is meant to create a release version of your form / application. The configuration of the post processing can be done in the Properties Editor under Application and then choose the Post tab.

During the first step the form is compiled, but not executed. The debug option is forced to off and the GUI option to on, so you can't forget to do it.

The second step is then the UPX compression when turned on.

The last step is the chosen command string from the post processing.

All output is send to the Process Output window.

Here is a simple example of an external command:

cmd /c Copy "[$ProjectDir]/[$ExeName].exe" "[$ProjectDir]/BlaBla.exe"

It will call the windows cmd.exe and /c is used to run the following command and exit afterwards. As you can see placeholders are used to form the command string.

When you start just normally your form using the RUN button, Logic Gui will run in parallel and you can edit your program while watching the output of the test run. Now with the new function to compile the release version, this is not the case anymore. Any editing is prohibited to minimize the chance to collide with file access while UPX compression or post processing.

Another important point is the external code, which could of course fail and thus hang Logic Gui. Probably most true during the test and design phase. To prevent Logic Gui from working while the external code stopped working, you will be able to hit the STOP button to force quit the errornous code. Only this STOP button will be polled during execution, all others are disabled! Every of the three steps (building,

compressing, processing) can be force quit. If a step was quit the chain is broken and no other step will follow.

5.3 Gadget TreeView

The treeview shows all available gadgets. Parent nodes group all gadgets of the same type but different styles together. Click on the plus sign or double click the parent node to expand or collapse that node. Beside the SmartButtons (special image buttons) you change the style also afterwards.

5.3.1 Adding Gadgets

Double clicking on one of the gadgets will change the cursor into a cross and let you add that gadget to the form. In the toolbar the cross icon is active now to visualize that you are in insert mode. Click on the pointer icon in the toolbar to cancel the insert.

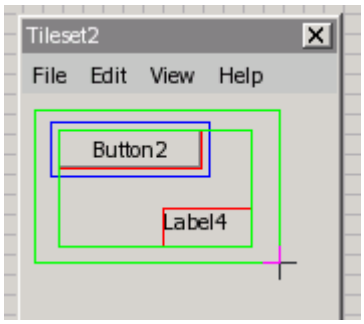


Illustration 69: Gadget TreeView - adding containers (parents).

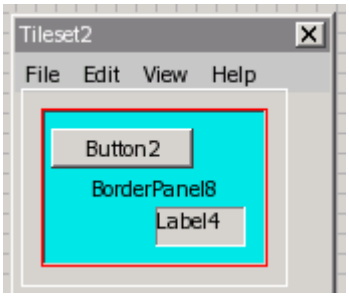


Illustration 70: Gadget TreeView - adding containers result.

When adding a new container gadget, it is checked whether you paste the new container on the workspace or another container, thus you can decide to have the new container in the background or foreground. This will save you regularly time and clicks to bring the container to front. On top there is a sorting of the new container, that means when you size the new container on top of an existing one which holds already some other gadgets, the new container will sorted underneath the gadgets but on top of the underlying container (layers are also taken into account).

When inserting new gadgets, they will be shown at the cursor. The new gadget will be drawn transparent until you add it to the form. Click to insert the gadget with the default size or size it directly to what you want. The new gadget will show the visual distance to other gadgets and also the top/left match to other gadgets, that should help to insert the gadget correctly on the first try.

5.3.2 How to set the default size of a gadget:

*Select an item inside the gadget treeview and **right-click** it.*

An extra window will open.

Choose "Width" and "Height" of the gadget. Move the slider, edit the textfield or use the cursor keys to adjust the numbers. What the "Range" stands for will be explained later.

When you apply your changes, they will be written to the config file and every new gadget of that type will use it as new default.

***Note:** Every single gadget style can have it's own default size.*

6. WorkSpace Window

The WorkSpace window is where you assemble your form.

You can choose between different tabs during work. Each tab supports you creating your form and are explained in the next sub-chapters in detail.

Illustration 71: WorkSpace Window

When loading a form or using save as, the filename is displayed in the title. Logic Gui shows a "" at the end of the filename in the titlebar when the form has changed and not saved yet.*

6.1.1 Form Design

This tab is activated by default when Logic Gui starts up. It shows the WorkSpace and on top your form.

Use the popup menu (right click) and the functions available there to adjust your gadgets.

When the WorkSpace is active you can use several shortcuts while your hands are at the keyboard. The WorkSpace is also automatically activated when a gadget is selected and you enter the WorkSpace with the mouse pointer.

***Note:** The WorkSpace itself can produce also a window in the source code, but this is for quick testing only and not meant as application window.*

When you click on a simple gadget (no container gadget), this gadget will now be sorted on top of the layer it is in. As you need your gadgets normally always on top of containers, you now don't need to change the order manually anymore. Simply click and drag, nice time saver.

When you select a group or just multiple gadgets and you want to change the primary gadget for the next action to perform, simply click on it! The selection stays intact and you are ready to go.

When clicking in a container gadget, this container will be the primary gadget. When using the selection frame nothing changed. Very useful when changing the properties.

We know already how easy it is to move even a bunch of gadgets to another place using the mouse. But sometimes we need to be very accurate and it's may not so easy to move very few steps. For that situation there two things available. First, you can open the Magnifier Window. So, now you can better see where you are. Or, secondly use the cursor keys to move your selection.

6.1.2 Full Code

Switch to the Full Code tab when you want to see the actual created source code at any time. This is useful when you want to check something or to copy something. The Full Code tab opens also automatically when a fault occurs and you hit on Show Error in the Process Output Window.

The source output has different sections.

First section is the header. It's used to define things like “Strict” or Import or Include files.

Second section is the gadget creation part, where the sizes and positions of your original form are used.

Third section is the event queue. Only the default events are produced, read on to see how to change that.

Fourth consists of the functions called by the event queue. Add your own code to those functions and your program is ready.

The fifth section is optional, it is similar to the Header and is taken to append extra code of your choice at the end of the source code.

The StatusBar shows the current cursor position to help you find a certain region.

Right click in the TextArea to get a pop up menu which offers a copy of selected text or calling Find window. The Find Window is explained in the Event Editor.

6.1.3 Selected Code

Selected Code does mean only selected gadgets and only the gadget creation code of it. This is especially useful when your form was already done and you are working with the output of Logic Gui in your favorite editor. At a certain point you may realize that you need a last minute change to a gadget or a group of gadgets, now you just do the change, select the gadget(s), switch to 'Selected Code' and you can easily copy the change to your IDE. If you select more than one gadget, every gadget code is separated by a newline. If you select a container gadget, the container with all it's children is output and again every children separately. If you select a container and there are gadgets and also other container on top, then you will get the output of all, the output of every container (container are separated by two new lines) and the output of the single gadgets, you can just pick what you need, you don't have to look around in the code where your changes are!

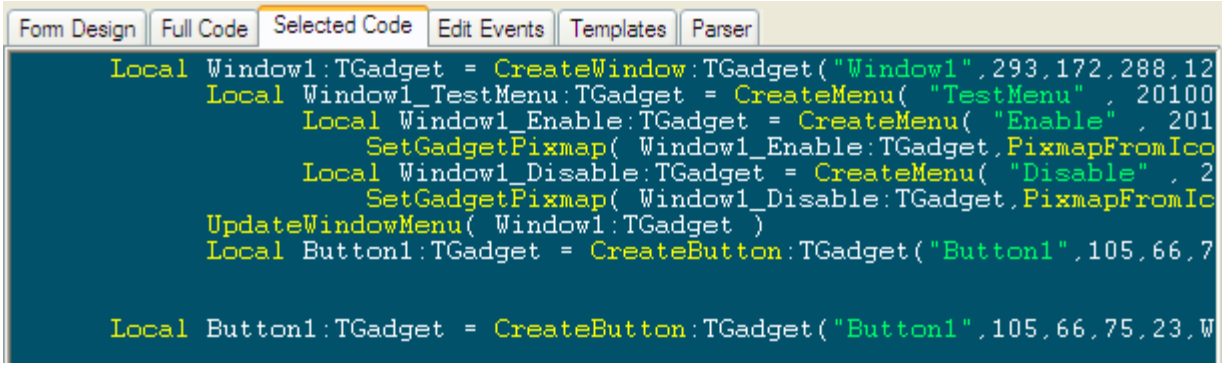


Illustration 72: Selected Code - gadget creation code only.

Right click in the TextArea to get a pop up menu which offers a copy of selected text or calling Find window. The Find Window is explained in the Event Editor.

6.1.4 Edit Events

Edit Events is just another view via the Event Editor onto the gadgets events, which offers some extra functions. Instead of calling every gadget and then calling every single event, you can switch at any time to the Event Editor and choose between all the gadget events. This should be especially useful when the form is designed and you want to give the gadgets their behavior. That should save a lot of time and clicks. As the Event Editor does not own a window, there is no pull down menu. The OK and CANCEL buttons are renamed to 'Revert' and 'Apply', that means, if you 'Apply' a certain text it is saved to the event, if you press 'Revert' the original text is restored or the text since the last apply. If you switch between events all changes are automatically saved. To be faster while changing between the 'Form Design' and the 'Editor' any change you do are automatically applied when you leave the Editor. That means you need to explicitly 'Revert' any changes when you don't want them saved. Thus apply is only required when you want to save your changes in between, but when you do so, the current full source code in the upper textarea is also updated to reflect your modifications.

All tool windows will be automatically hidden when choosing the 'Edit Event' from the WorkSpace tabber and the treeview for all the events are selected, thus you can immediately start to work on the gadget behavior. The Window is also automatically sized to full screen, if you don't like that, it can be customized in the ini file.

Note: There is an extra undo step before the edit mode. But remember that the undo does only revert gadget

related stuff, all changes done to the application files are not affected!

When you leave the Edit Events tab your code will be stored and the current event and gadget will be remembered. When you come back later, the last known event and gadget and cursor position will be restored, if still available and you can go on working.

For those who do the coding inside Logic Gui via the Edit Events you can toggle the split away to have a good overview of the code and when you set the cursor into the full source code and right click "Edit This Text", Logic Gui will select automatically the corresponding gadget and event in the Event-Treeview on the right side. It will raise the split if needed and show the event text, ready to edit. This should help to edit your code more visual. If the cursor position is located in an area where the edit is somewhere else, but not here in the Event Editor, a message will pop up where to find the right place.

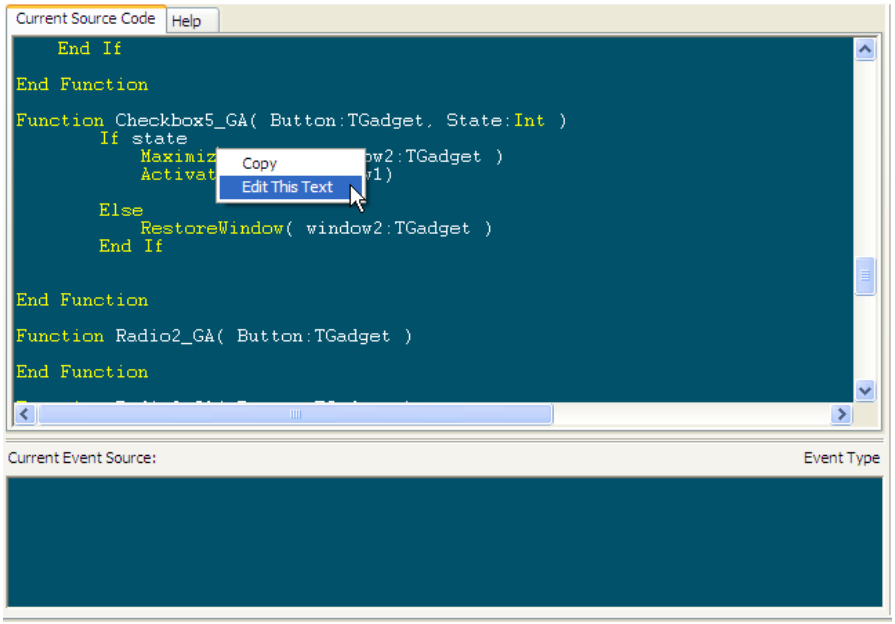


Illustration 73: Edit Events - Event Editor - reverse lookup of gadget and event

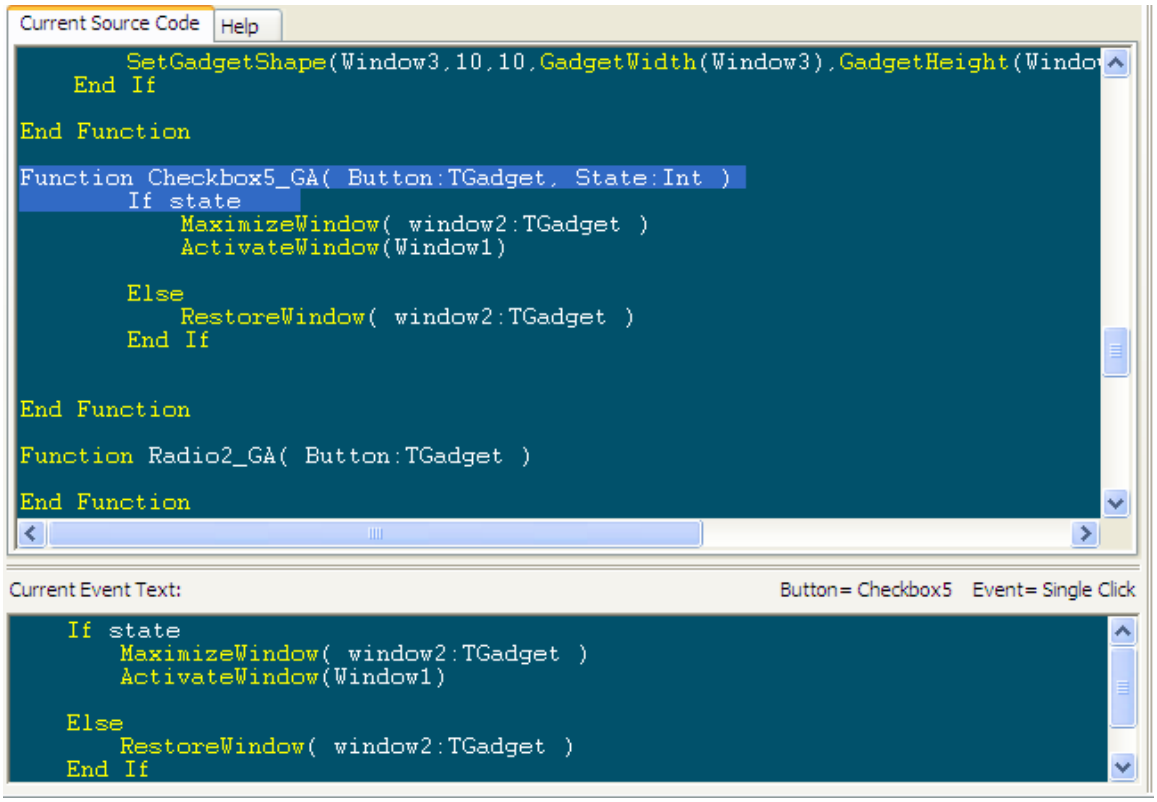


Illustration 74: Edit Events - Event Edititor - Event chosen after reverse lookup.

All other Event Editor related stuff check out at Properties Editor / Event Editor.

6.1.5 Templates

The idea is that we have a folder called 'Templates' in the Logic Gui directory and when you click on the Templates tab, this dir is read. As Logic Gui stores a picture with every form, all forms are shown as thumbnails. Now you can simply click on a certain form and this inserts the template(-form) in your current form. Fast and easy (and can be undone). As the form comes from the template folder, it is automatically assumed to be inserted. As you could see the thumbnails before, it should be simple to identify the form needed.

Name, Size and Date of the form is displayed when hovered with the mouse for more info.

If you like to try this, remember that every form is also a template. Just select a bunch of gadgets you like to store and choose 'Save As - Selected' and as target now use the templates folder, that's it. If you like you can also switch on the 'Force Display on Load' checkbox (Properties Editor/Application/Info) with an appropriate note for this template, it will display the next time you load the template.

6.1.6 Parser

A MaxGui source code to Logic Gui form converter is available here! The idea is, that you will be able to drop some MaxGui source code into Logic Gui and it will automatically create the gadgets and form for you. Parsing all MaxGui commands is a quite complex thing and I try to catch as much information as possible, but there are of course limits I can't overcome. First of all, all values computed during runtime Logic Gui can't know during the parse and second, nested commands can't return values (although no problem to parse). Beside those limits the functionality will be very very useful.

Just imagine you have created a form in Logic Gui and when ready, copied to your program code. Most of the time small tweaks are necessary to the form during coding, but you didn't do it in Logic Gui and thus the form got out of sync. When you later on need a bigger change, what can you do? Follow up the changes in Logic Gui, easy to miss something? Do the big change directly in the code and bring the form even more out of sync and it takes far more time? Now, with the new parser, you will be able to drop your code into Logic Gui, which creates the form, move / add / change your gadgets and copy the result back, easy as that.

Another big advantage is of course any foreign code you may come across and you like to work on. You don't have to recreate the form by reading the code to get a Logic Gui form out of it!

List of commands:

Reference what the parser knows till now:

SetPanelColor ,LoadPixmapJPG ,LoadPixmap ,SetTextAreaColor ,LoadIconStrip ,SetGadgetIconStrip ,DisableGadgetItem ,SetToolbarTips ,EnableGadgetItem ,AddTextAreaText ,SetGadgetFont ,ClearGadgetItems ,AddGadgetItem ,AddTreeViewNode ,ShowGadget ,EnableGadget ,ActivateGadget ,SetMaxWindowSize ,SetMinWindowSize ,ActivateWindow ,SetStatusText ,SetButtonState ,SetGadgetAlpha ,SetGadgetTooltip ,SetPanelPixmap ,HtmlViewRun ,HtmlViewGo ,SetGadgetLayout ,SetTextAreaFont ,SetGadgetTextColor ,SetGadgetColor ,SetGadgetSensitivity ,SetTextAreaTabs ,HideGadget ,DisableGadget ,UpdateProgBar ,SetSliderRange ,SetSliderValue ,SetTextAreaText ,SetGadgetText ,CreateTreeView ,CreateTextField ,CreateTextArea ,CreateTabber ,CreateSlider ,CreateProgBar ,CreatePanel ,CreateListBox ,CreateLabel ,CreateHTMLView ,CreateComboBox ,CreateCanvas ,CreateButton ,CreateWindow ,Global ,Local ,Field ,LoadGuiFont ,LoadPixmapPNG ,SetGadgetPixmap ,SetGadgetFilter, CheckMenu, UnCheckMenu, DisableMenu, EnableMenu, SetMenuText, CreateHyperlink, CreateSplitter (MaxGui ProxyGadget), SplitterPanel, SetSplitterOrientation, SetSplitterPosition, SetSplitterBehavior, CreateScrollPanel, ScrollPanelClient, FitScrollPanelClient, ScrollScrollPanel, ScrollPanelX, ScrollPanelY

There is also the support for comments. You can use Rem / EndRem or just the 'apostrophe to skip parts in the source code which should not be parsed. Commands can be spread over several lines with the .. syntax or combined on one line with the ; semicolon. Parentheses for commands are optional, so use them or not.

Menus:

When no variable name is used for a menu, Logic Gui will create one out of the text, as it is needed internally. Also separators are handled, and as there is no text, they are just counted...

When a menu refers to a certain window a new menu structure is created inside Logic Gui and all submenus

are added. This new menu will get the name of the window in the menu list of the Menu Control Center, thus easily to identify. When a menu refers to a window which does not yet exist, the menu will be named "Parsed_Menu".

One minor issue is with menu separators like: CreateMenu("",0,MyMenu). When parsed, i can only detect the parent, but not which separator it is in an existing menu with several separators under 'MyMenu'. So in case you re-parse the same menu twice, there could be surplus separators, which need to be removed manually.

In fact it's best when no or only one menu exist in the menu list to have any updates and assignments to the right menu entry and to parse the whole menu in one go.

PopUpMenus:

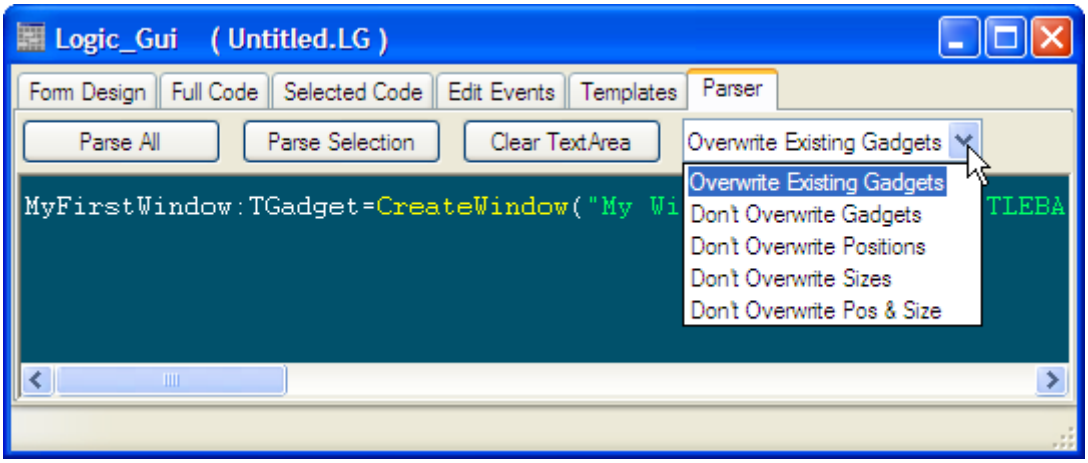


Illustration 75: Parser Tab

The name of a popup menu is taken from the variable name of the top entry.

To use the parser click on the 'Parser' tab (or drag and drop a .bmx file on to the WorkSpace window). You will see some buttons and a big TextArea. Copy the source code you want to parse into the TextArea. If the code contains also other than the 'known' MaxGui commands, this is most of the time not relevant, but try to cut, copy and paste full lines.

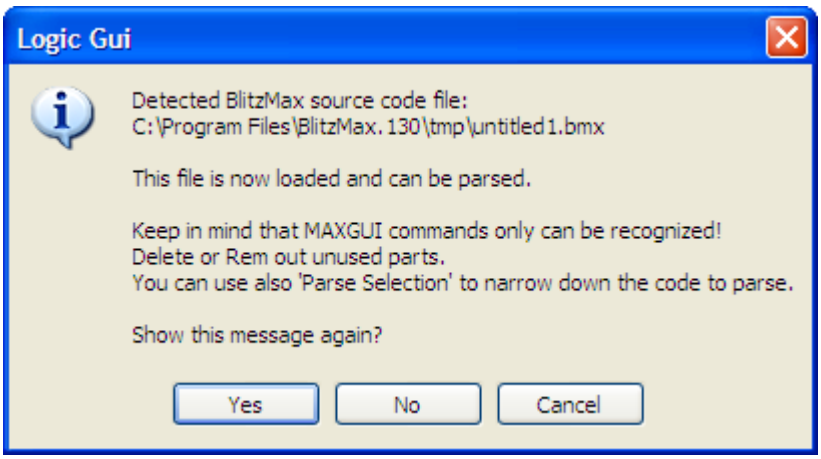

Logic Gui
Detected BlitzMax source code file:
C:\Program Files\BlitzMax.130\tmp\untitled1.bmx
This file is now loaded and can be parsed.
Keep in mind that MAXGUI commands only can be recognized!
Delete or Rem out unused parts.
You can use also 'Parse Selection' to narrow down the code to parse.
Show this message again?
Yes
No
Cancel

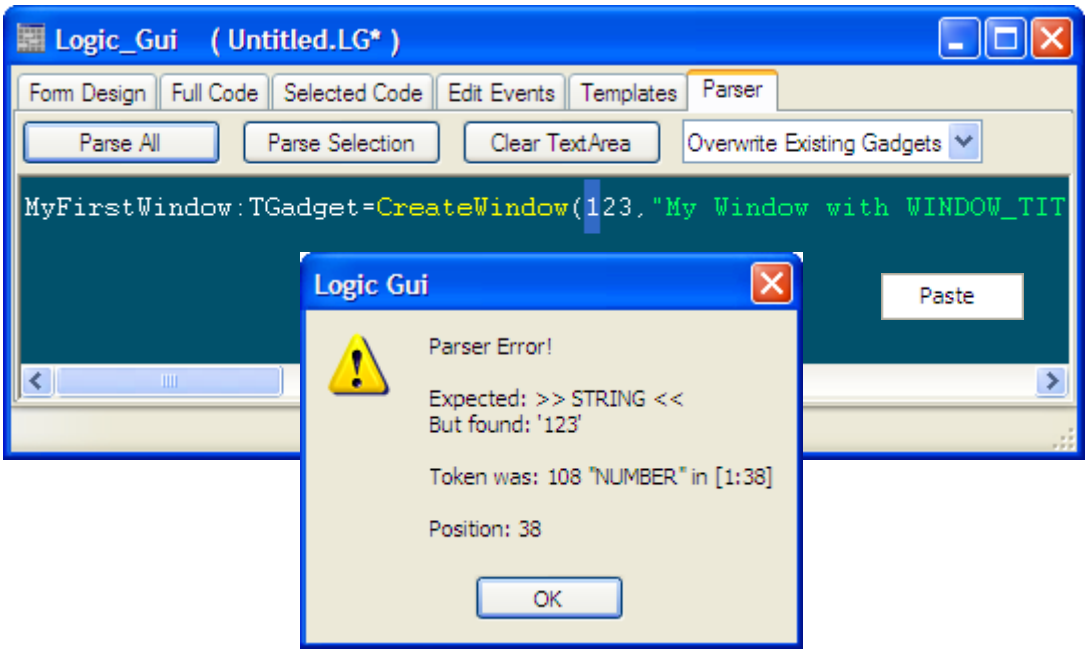
Illustration 76: Drag + Drop .bmx file onto the WorkSpace

Sometimes the TextArea itself don't recognize the correct linefeed from pasted code, adjust it before parsing the code!

When ready, you can choose between 'Parse All' or 'Parse Selection'. As the name says, Parse All will go through all the code and try to find the keywords to build the form, while Parse Selection parses only what you have highlighted.

When you often paste new code into the TextArea, you can click on 'Clear TextArea' before, to wipe out the old text and activate the TextArea for pasting (CTRL-V).

A combobox allows you to choose what should happen when a gadget is parsed again or already



exist. The default is "Overwrite Existing Gadgets". That means, if you change a setting of a gadget in the source code and that particular gadget exists in your form and you parse that source code, then the gadget is updated/synced with the current source code settings. If you choose "Don't Overwrite Gadgets" in the combobox, then no existing gadget will be altered, but non existing gadgets will be created. "Don't Overwrite Positions" will keep the original positions, but all other settings can change. For "Don't Overwrite Sizes" and "Don't Overwrite Pos & Size" applies the same idea.

If there is a problem the parser can't recover from, an error pops up. But keep in mind that the parser does not check if the code makes sense or if it complies to the MaxGui command syntax.

The parser marks the place where it could not recognize what's going on, but as you know from BlitzMax itself the real problem could be before that place.

An undo state is stored before the parsing alters the gadgets and a second undo is perhaps created when new gadgets were created. Both things can be taken back then individually if needed. The content of the parser textarea is saved with the form.

To paste your text from the clipboard use CTRL-V or the popup menu of the parser textarea (offers also a find. The Find Window is explained in the Event Editor.).

7. Gadgets and Properties

7.1 Windows

7.1.1 Standard Window

The standard window is the base for every form normally. Use this as your application window (and not the WorkSpace window) and add gadgets on top.

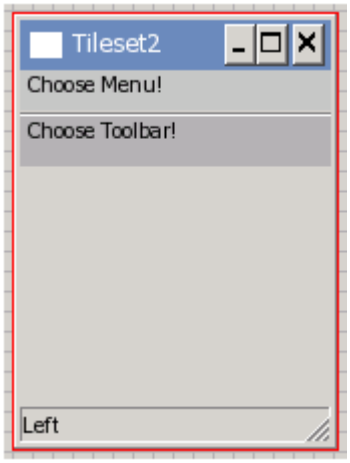


Illustration 78: Window Gadget - choose menu or toolbar.

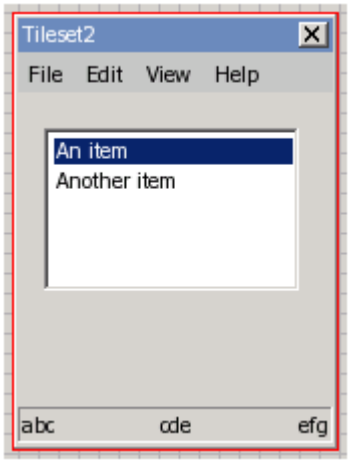


Illustration 77: Window Gadget - with menu and statusbar.

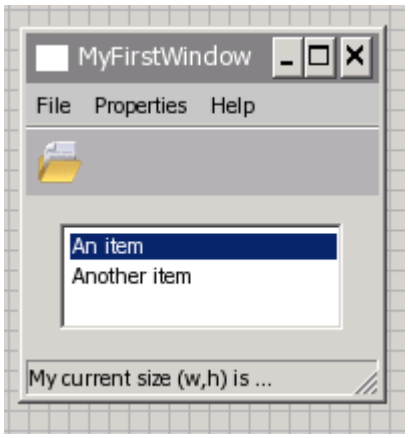


Illustration 79: Window Gadget - with toolbar and code in statusbar.

A menu dummy will be in place on a Window when selected to show the space taken away by it. The root entries of the menu are visible to check appearance. All child gadgets will get adjusted coordinates. A toolbar dummy is also visible when used. The size will differ depending on the loaded toolbar icons. Icons are displayed in the form as chosen in the toolbar tab. Be careful when looking at the parent relative coordinates, the toolbar does not subtract any value here. A Statusbar is visible in the Windows when enabled. That includes also the Statusbartext for the left, middle and right position. If you use Function Return values three dots ... represent this in the form.

Note: *When double clicking any of the new window dummys you will be automatically transfered to the right place. Double click the title to open the window style dialog, double click the menu to open the Menu Control Center, double click the toolbar to open the window toolbar dialog and finally doubleclick the statusbar to open the window view dialog.*

When using Client Coordinates as window style, Logic Gui calculates the inner client area and puts that into the source code. That means i do not change the view of the window in the workspace. Advantage is, you can see all as expected. Disadvantage, the width and height of the window in the Gadget Control Center does not reflect the inner, but the outer area.

7.1.2 Child Window

Child windows are not anymore supported in MaxGuiEx! They will only work with the older MaxGui and left in for legacy support.

Child Windows don't support menus and can't be moved outside it's parent in MaxGui.

7.1.3 Special Window Properties

The following properties are only valid for window gadgets.

7.1.3.1 General

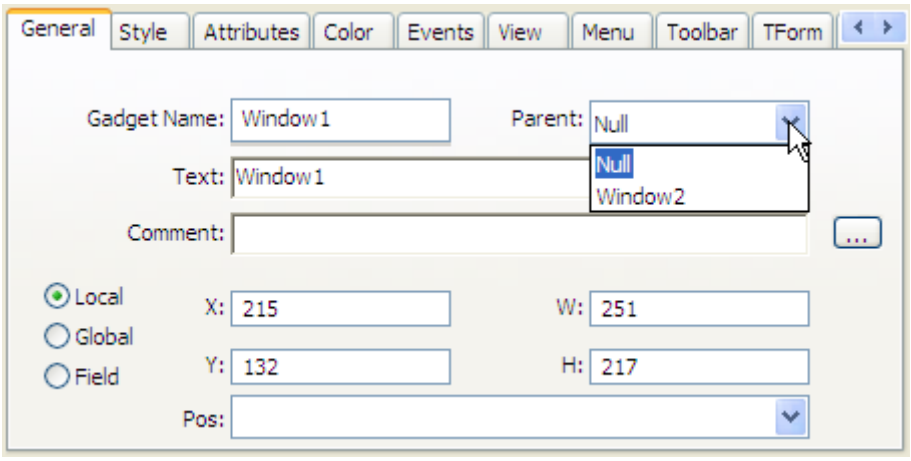


Illustration 80: Special Properties - General - for window gadgets.

The General Tab for window gadgets has an extra combobox at the bottom to select an anchor point for the window when created. Additional to the anchor point you can define an offset from that. Use the X and Y textfield to enter a positive or negative value, which will be added to the calculated anchor point.

With the anchor and offset you can position your window independent from the desktop resolution. This option is only available when the "Independent" flag of the window style is set!

An additional possibility lets you enter a parent. Choose via a combobox from all available window gadgets. The default is 'Null', that means the window is completely independent from other windows, but when you choose to take another window as parent then the current window will be minimized and restored with the parent window. (Like what you see in Logic Gui when you minimize the WorkSpace and the tool-windows do automatically follow.) The parent window will always stay in the background during runtime. If you delete the parent window in the form, the default of 'Null' will be restored.

***Note:** The window independent style needs to be active!*

7.1.3.2 Style

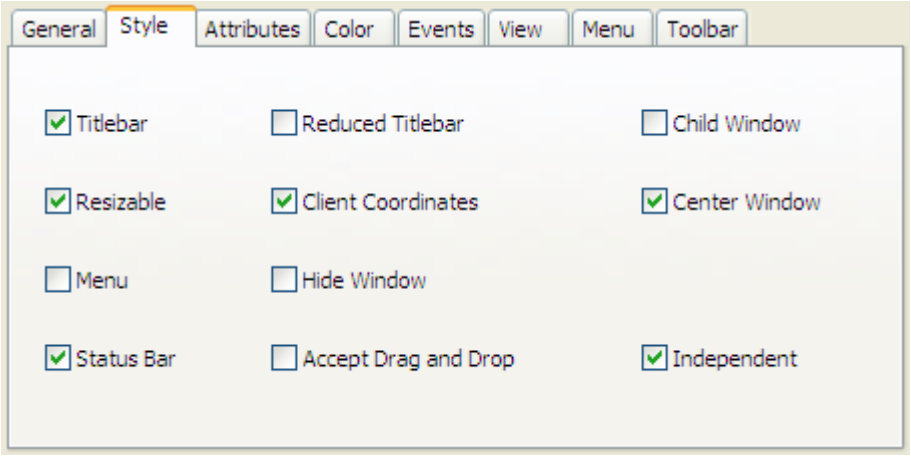


Illustration 81: Special Properties - Style - for window gadgets.

Select the window style as known from the MaxGui docs. Additional there are two extra checkboxes:

1. *Child Window – this could be used by the old MaxGui module and was undocumented. The Child Window could not leave the parent it was bound to. The new MaxGuiEx does not support it anymore! If you need it, have a look in the user area, there is a win only api example.*
2. *Independent – This is a Logic Gui internal flag and can be set to identify a window which is not parented to another gadget.*

Note: *For the WorkSpace window the independent checkbox is not available, as the WorkSpace never has a parent.*

Note: *Turning on the Drag & Drop Event of a Window changes the Window style to accept Drag&Drop as well.*

7.1.3.3 View

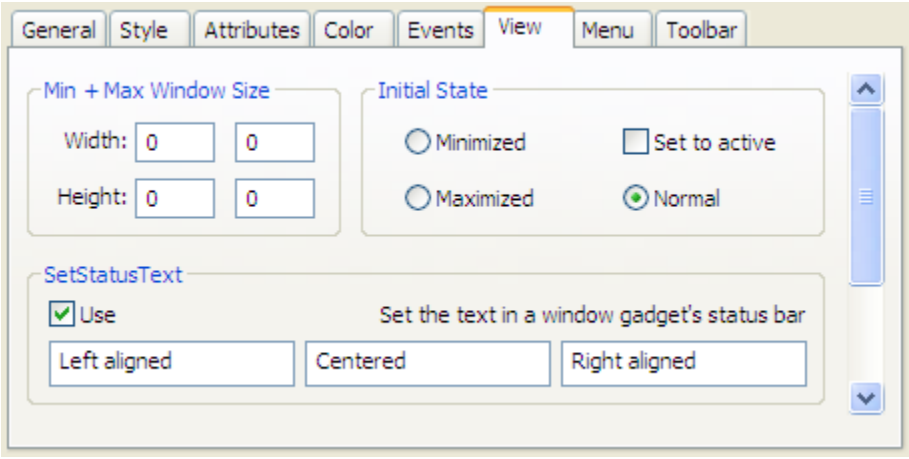


Illustration 82: Special Properties - View - for window gadgets.

In the View tab you are able to adjust how the window will look and act.

In the ***Min. + Max. Window Size*** *you can adjust how small and how big your window is allowed to get while resizing.*

Initial State

Set up how the window should be created. When you enable the "Set to active" checkbox, you should not activate any other gadget after that, only one gadget can have the focus.

Set Status Text

Enter some text which should show up in the statusbar region of the window. Use one, two or all three textfields to customize the later view. The text for example entered in the middle will always be centered independent from the window size.

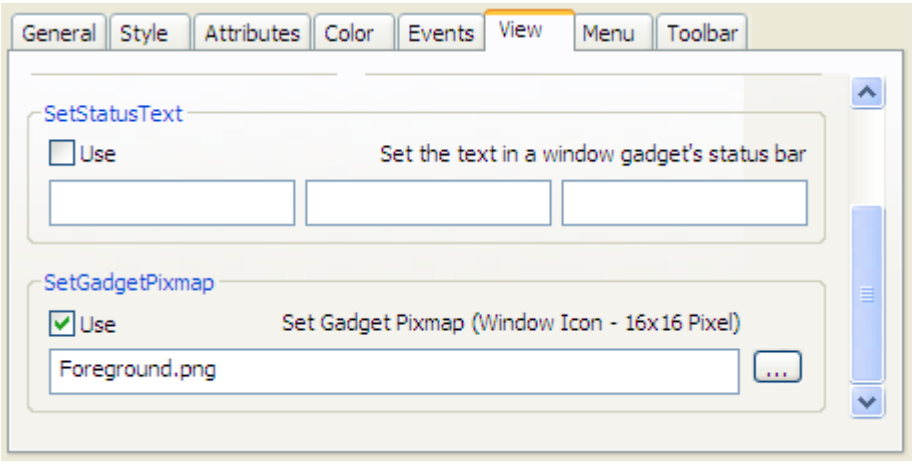


Illustration 83: Special Properties - View - set window icon.

SetGadgetPixmap for icon support of window gadgets is available in the 'View' tab (MaxGui status not official yet!). Scroll down the scrollbar and at the bottom you will find the setting. The chosen icon is also visualized in the form.

7.1.3.4 TForm

It will be used to set up some TForm and window type specific settings (only used when Type creation is enabled). A requester pops up when you click on the TForm tab of a window property and the type creation is not yet enabled. The requester lets you directly enable it if you like.

Two entries are similar to the event tab: First you can define the usage and code, which should go inside the window type itself. This code will be inserted underneath the variable definition, but before any methods, thus you can add your own Field and Global variables to this window type and also add your getter and setter and other methods. Second, you can define the usage and code which should go inside the OnEvent method, this is important only when you want to add your own self-made gadgets and types and act on the events without own hook function. The code is saved with (inside) the form (no external files).

In the Event Editor these two entries for window gadgets added as 'User Data Inside Type' and the 'User Data Inside OnEvent Method'.

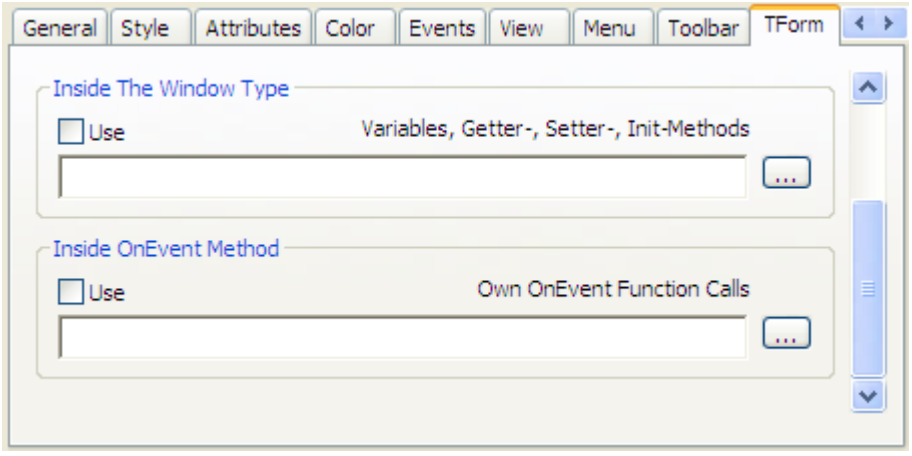


Illustration 84: Special Properties - TForm

When you use a method called 'InitForm()' (exactly the same name please) in the 'Inside The Window Type', then this method is called directly after the form creation. That should help to initialize your form without extra calls or setup.

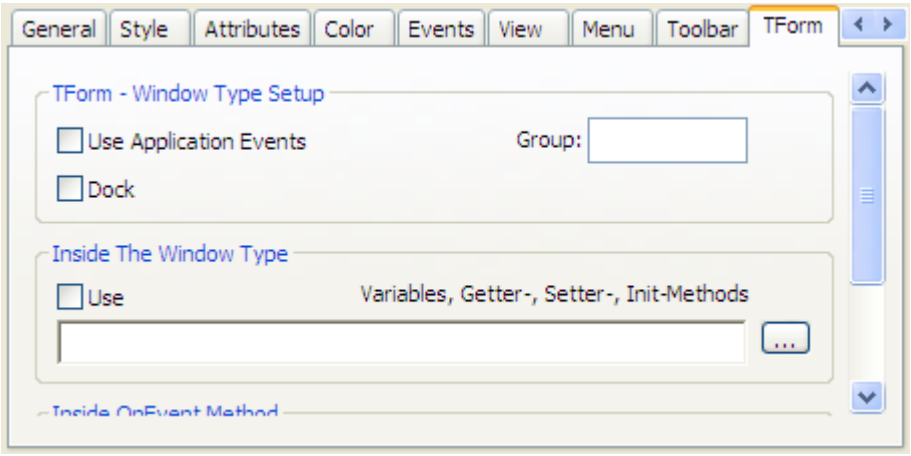


Illustration 85: Special Properties - TForm

In the TForm tab you will find a checkbox where you can enable the application events. For instance you have several windows in you form, but only one of them is may the main window, all others are probably child/tool-windows. If you want to act on the application suspended event for example, then this is normally detected by the main routine/window, thus you should enable it for that certain window (but you are also free to enable it in other windows if needed). In window types where this flag is detected all application events which are enabled (Properties/Application/App.Events) are put into the OnEvent Method.

A comma separated list of group names can be entered in the Group textfield, this window belongs to. This group field is available in the TForm type which is extended by the window type. When set, the group can be taken to let act certain commands on several forms/windows in one go. For instance show or hide all windows which belong to the group 'tools' or disable all windows for a modal dialogue and so on. The group is just a string which should make sense to you.

7.1.3.5 Timer

A requester pops up now when you click on the Timer tab of a window property and the type creation is not yet enabled. The requester lets you directly enable it if you like.

When Logic Gui creates single types out of every window you may need different timer settings in those types, to do so you will find now a timer tab in every window. This timer tab allows you to create a timer for exactly that window type.

If you need a global application timer checkout the TFormTimer type provided by Logic Gui (Properties Editor/Application/Types tab, Timer tab and ExternalTypes folder...)

7.2 Buttons

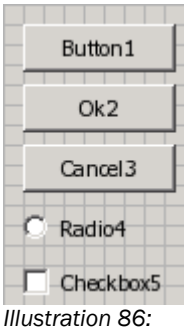


Illustration 86: Buttons

7.2.1 Push Button

The standard push button. With MaxGuiEx you can make use of a button pixmap.

7.2.2 OK Button

A standard push button that is also activated when the user presses the RETURN key

7.2.3 Cancel Button

A standard push button that is also activated when the user presses the ESCAPE key

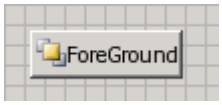


Illustration 87: Push Button - with a small pixmap.

7.2.4 Radio Button

Use more than one button to create a radio button group (best on a separate panel). Let one button default to true (selected).

7.2.5 Checkbox Button

A check box button that displays a tick when it's state is TRUE.

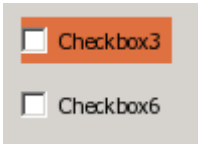


Illustration 88: CheckBox Buttons - with colored background.

7.2.6 Special Properties

7.2.6.1 Style

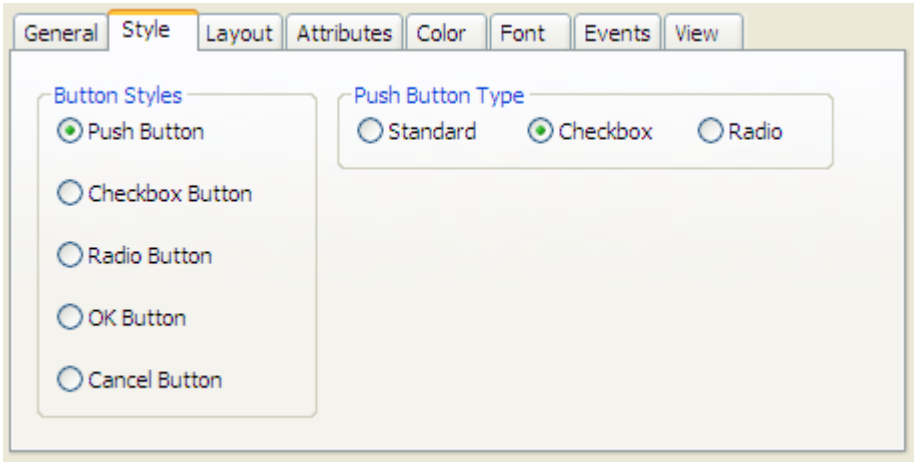


Illustration 89: Special Properties - Style - for button gadgets.

Switch between the different styles and the selected gadget will be converted automatically.

7.2.6.2 View

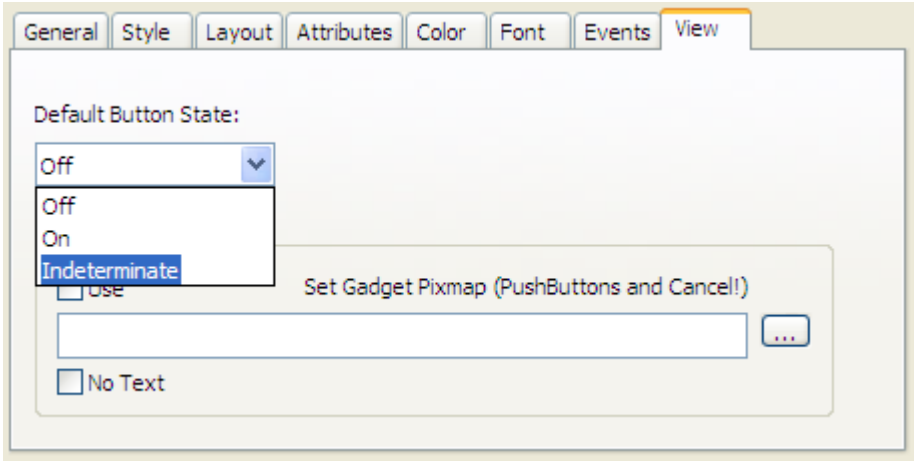


Illustration 90: Special Properties - View - for button gadgets.

Default Button State

For a checkbox or radio button you can set the default state, for other styles this has no effect.

SetGadgetPixmap

Set a picture on top of a button, either a small one which can stay together with the button text or a big one without text as image button.

7.3 TextFields

TextFields can show fore and background color.

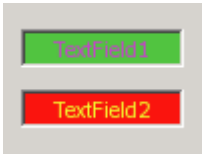


Illustration 91: Textfields

7.3.1 Standard TextField

Single line text input.

7.3.2 Password TextField

Single line text input which hides the input (showing asterisks)

7.3.3 Special Properties

7.3.3.1 Style

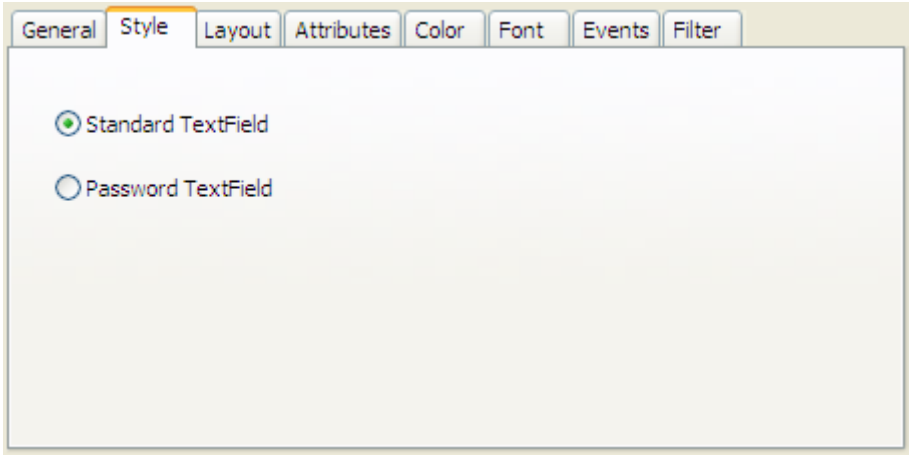


Illustration 92: Special Properties - Style - for textfield gadgets.

Switch between the different styles and the selected gadget will be converted automatically.

7.4 Panels

Panels are mainly used to group other gadgets together, but can also used to build own gadgets. They can have a background image and in MaxGuiEx also an alpha value. Not often used, but still sometimes useful they can have a toolbar attached, which can then be positioned everywhere independent from the window. When in type creation mode a panel and it's gadgets on top can also act as an independent type.

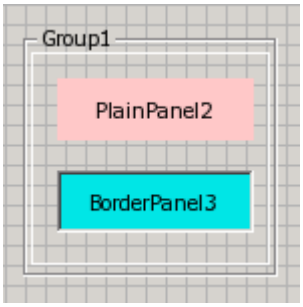


Illustration 93: Panels

7.4.1 Panel as Group

Used as group with frame and title.

They are drawn in Logic Gui with transparent background as it is done now in MaxGuiEx.

7.4.2 Panel plain style

Perfect usage as container gadget with other gadgets on top.

Illustration 94: Panels - Panel with toolbar

7.4.3 Panel with sunken border

A panel with a border...

7.4.4 Panel with raised border

(Windows only – status of MaxGui 1.4.1)

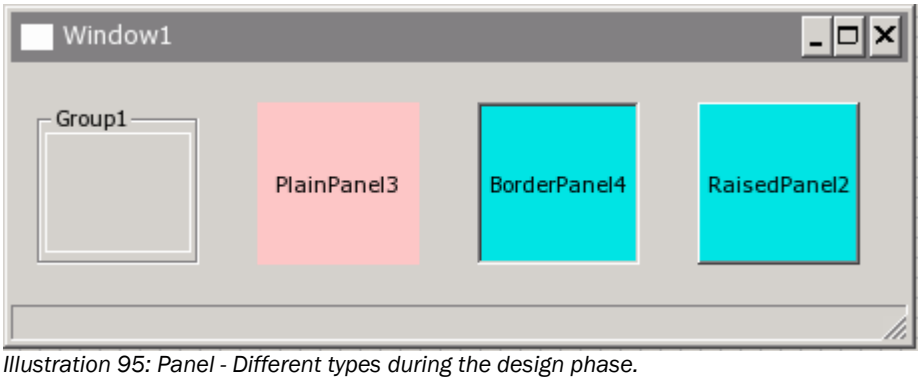


Illustration 95: Panel - Different types during the design phase.

7.4.5 Special Properties

7.4.5.1 General

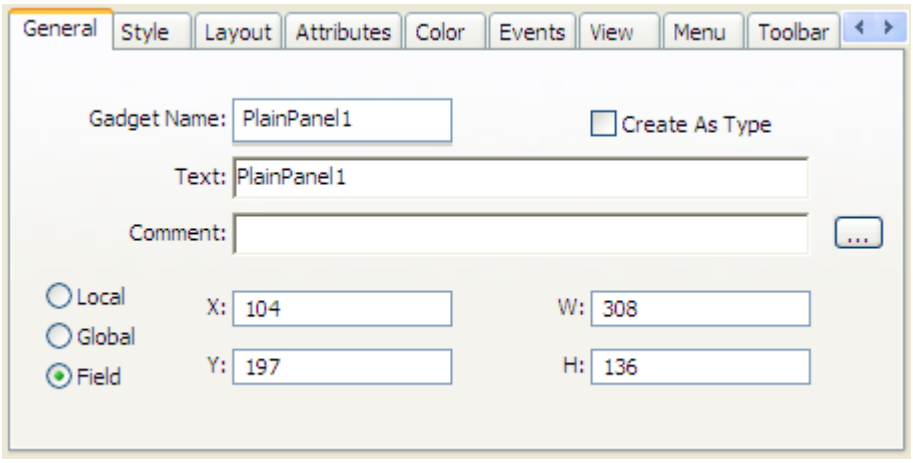


Illustration 96: Panel - General Tab, important for independent type creation

When type creation is enabled in Properties / Application / Gadgets, you will find an extra checkbox in the General tab of the panel gadget (and only then!). If this checkbox 'Create As Type' is enabled, the panel will produce a type on output. The type will contain the variable declaration, the creation method, the OnEvent method and all relevant event methods. While you toggle the 'Create As Type' checkbox, also the panel comment field toggles it's behavoir, which is now used as extend for the new panel type.

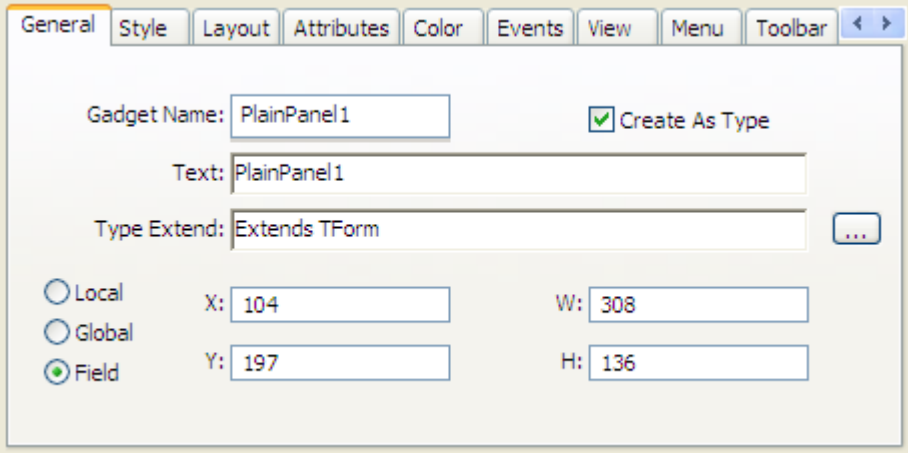


Illustration 97: Panel - Genral Tab, Create As Type

As extend the standard "Extends TForm" is inserted, thus the panel type is automatically hooked in the eventqueue on creation and managed by the base type. You can use of course your own stuff here if you like.

Creating a panel type let's you add the same panel several times where ever you want in your code, it's like a proxy gadget but already managed.

Additional the panel has two tabs, same as for window types, the TForm and Timer tab. In the TForm tab you can add extra information which should appear between the variable declaration and the form creation code. This is the right place for your own variables and own methods you like to have in that type. You can also put extra code in the event queue, rarely used, this is for your own OnEvent function calls. Checkout also the window type creation for more information.

A few things you need to be aware of:

A panel which sits somewhere in your form, that you are able to adjust position and size produces the code for the current state and context. When you enable the type creation for that specific panel, it won't do that any more, but produces the independent type. That means, that although you see the panel at a certain position, it won't show up there until you call one instance and put it there!

When you put normally a panel outside a window on the WorkSpace, it is considered as parking and won't produce output at all. But now, when a panel is selected to create an independent type, it will produce code like a window!

The point is, that we are able to create a lot of independent form parts (may best saved as templates) and we can add them to any new form as we need them on a single click. Those templates are more useful than ever before, because they could completely closed and ready to use.

When you leave the panel inside the form for better adjustment, that's most of the time ok, but not supported on Tabber and ScrollPanel! Once adjusted you should move them out on the WorkSpace and only call the instances you need.

7.4.5.2 TForm

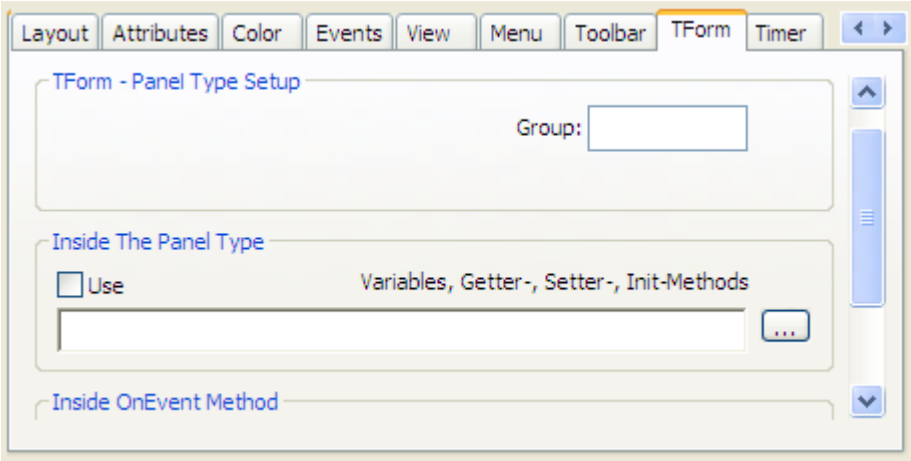


Illustration 98: Panel - TForm, Independent type creation

Setup your data inside the panel type. Only relevant when "Act As Type" is enabled in the General tab.

7.4.5.3 Timer

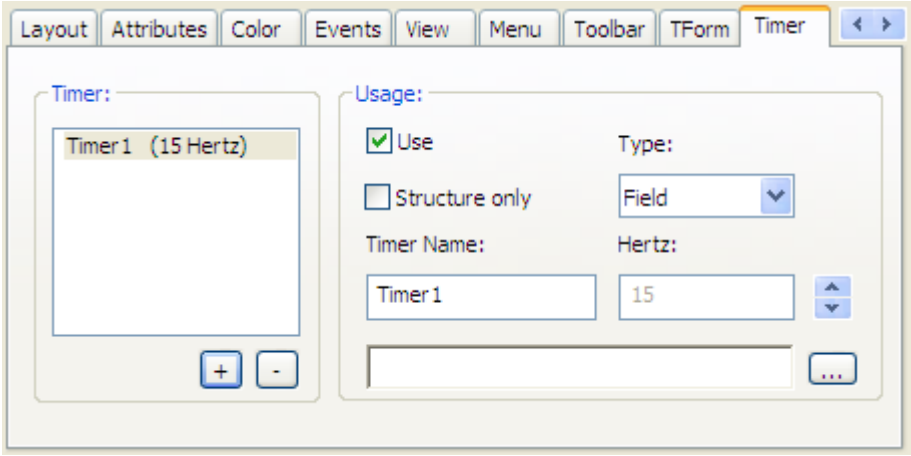


Illustration 99: Panel - Timer, Independent timer for inside the panel type

Setup timer, which acts only inside the panel type, when "Act As Type" is enabled. Checkout timer for more information.

7.4.5.4 Style

Illustration 100: Special Properties - Style - for panel gadgets.

Switch between the different styles and the selected gadget will be converted automatically.

Activate Events will turn on the sensitivity of mouse and key actions on this panel. If not yet selected it will be turned on when you switch on any of the available events.

7.4.5.5 View

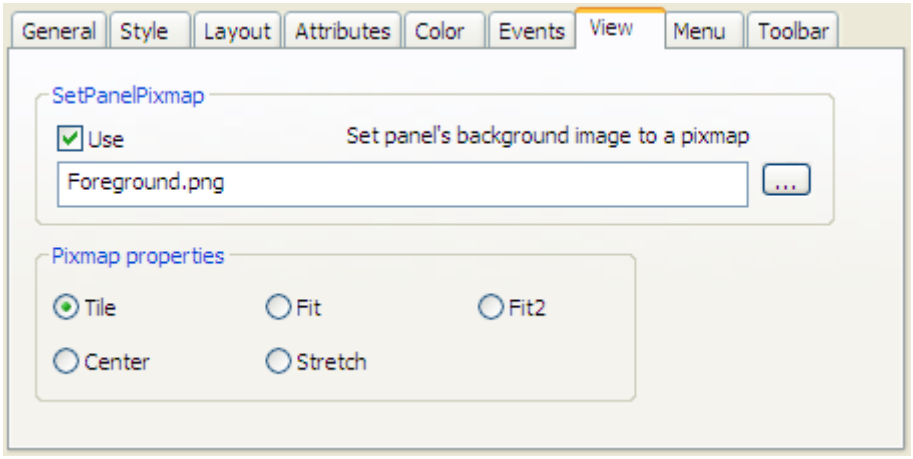


Illustration 101: Special Properties - View - for panel gadgets.

SetPanelPixmap

Set a background picture to the panel, also shown in the form.

Pixmap properties

Choose which style you like to use to spread your pixmap onto the background. Tile - The panel is filled with repeating tiles. Center - The pixmap is positioned at the center of the Panel. Fit - The pixmap is scaled to best fit the Panel size. Stretch - The pixmap is stretched to fit the entire Panel. Fit2 – another "Fit" method.

7.5 Labels

All labels are now drawn with a transparent background unless you change the color from the Properties Editor color tab. When changed the fore and background color is taken for the form and source.

The separator can not only drawn horizontal, but also vertical. Logic Gui checks if width or height is bigger and sets always the other one accordingly.

When using labels, Logic Gui supports also multiple lines. Insert your text for the label separated by spaces and size your label on the form to fit exactly your needs. Use Left, Center or Right alignment as needed. You can immediately see how it will looks like.

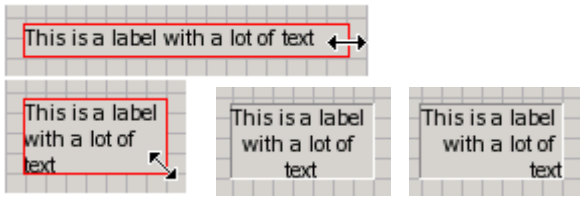

This is a label with a lot of text
This is a label with a lot of text
This is a label with a lot of text
This is a label with a lot of text

Illustration 103: Label Gadget - multiple lines and alignment.

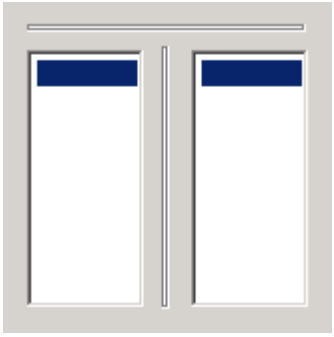


Illustration 102: Label Gadget - horizontal and vertical separators.

You can enter also "" inside the label text to quote something or use also a return/newline to arrange your text.

7.5.1 Label plain style

Standard label.

Illustration 104: Label Gadget - with or without color.

7.5.2 Label with simple border

One pixel black line as border.

7.5.3 Label with sunken border

With etched border.

7.5.4 Label as separator

As separator line.
Since MaxGuiEx not only horizontally, but also vertically available.

7.5.5 Special Properties

7.5.6 Style

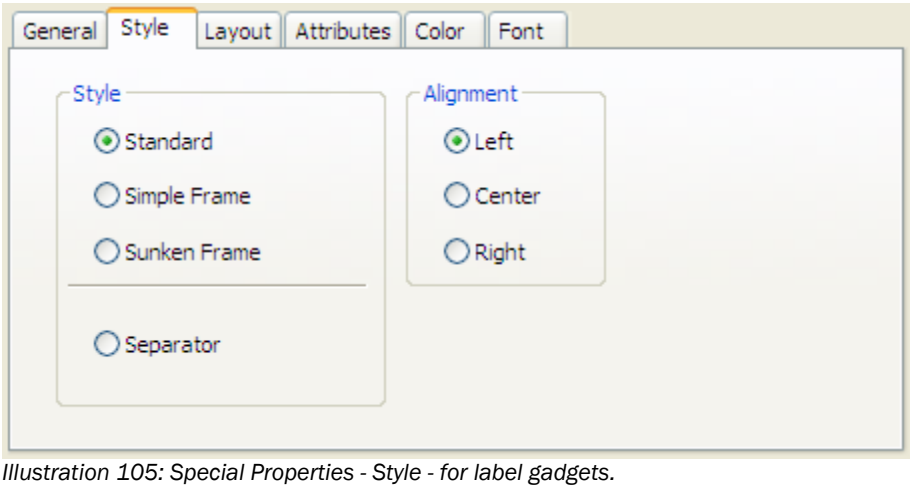


Illustration 105: Special Properties - Style - for label gadgets.

Switch between the different styles and the selected gadget will be converted automatically.

The "Separator" is a special form of a label and is only an etched box with no text useful for drawing separators.

Alignment

Define how the text of the label should be aligned.

7.6 Sliders

Sliders are available horizontally or vertically.

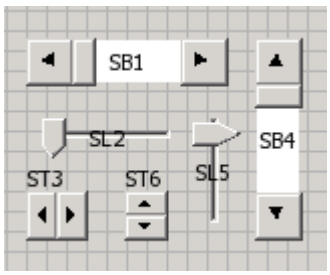


Illustration 106: Slider

7.6.1 Slider Scrollbar

Standard scrollbar.

7.6.2 Slider Trackbar

In MaxGuiEx trackbars are now drawn with transparent background or can have a chosen background color.

7.6.3 Slider Stepper

Simple stepper.

7.6.4 Special Properties

7.6.4.1 Style

Illustration 107: Special Properties - Style - for slider gadgets.

Switch between the different styles and the selected gadget will be converted automatically.

7.6.4.2 Value

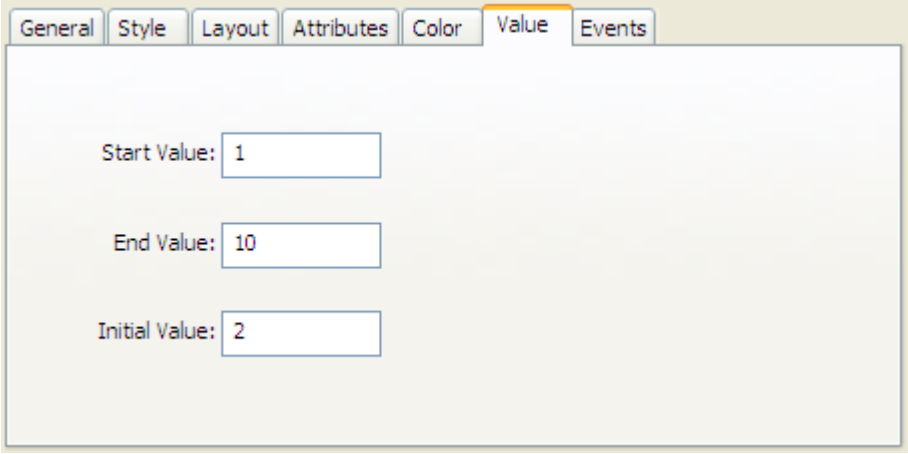


Illustration 108: Special Properties - Value - for slider gadgets.

In the Value tab you can set the start, end and the initial value the gadget will be created with.

7.7 ComboBox

Illustration 109: Combobox

7.7.1 Standard ComboBox

Drop down list of items.

7.7.2 Editable ComboBox

Combination of textField and ComboBox. Thus you could also add your own stuff easily to the ComboxBox list.

7.7.3 Special Properties

7.7.3.1 Style

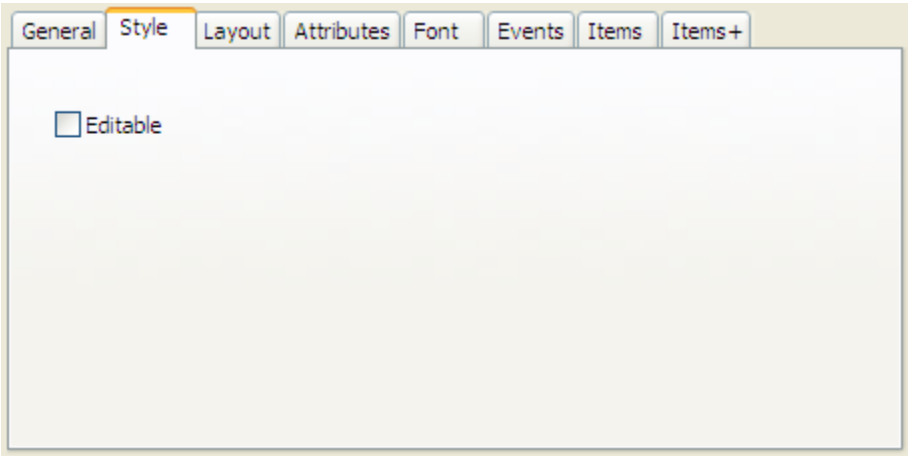


Illustration 110: Special Properties - Style - for combobox gadgets.

Select if you want to be able to edit the text the combobox displays.

7.8 ListBox

Illustration 111: Listbox

7.8.1 Standard ListBox

A box with a table of items.

7.8.2 Multiselection Listbox

The Listbox got an experimental gadget style - LISTBOX_MULTISELECT - which is not yet documented in MaxGui, but as the name says, it allows to select more than one item (shift click for a range, or ctrl click for individual items). To set this in Logic Gui, the Listbox properties has a Style tab where this option can be selected or not. If you need directly at creation time more than one item selected, just set the 'Flags' combobox in the 'Item+' tab of the Properties Editor to Default instead of Normal for every item which should be selected.

Checkout this: http://www.blitzbasic.com/Community/posts.php?topic=80314

7.8.3 Special Properties

7.8.3.1 Style Tab

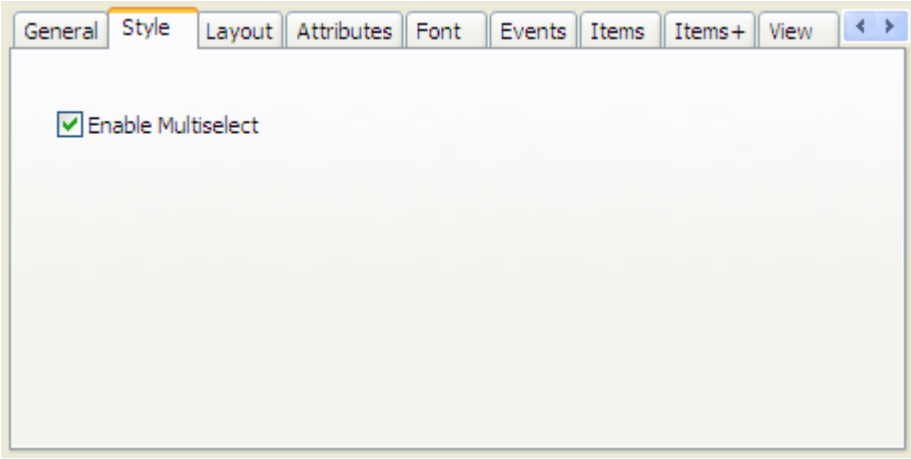


Illustration 112: ListBox Gadget - Style tab.

7.8.4 Special Properties

7.8.4.1 View

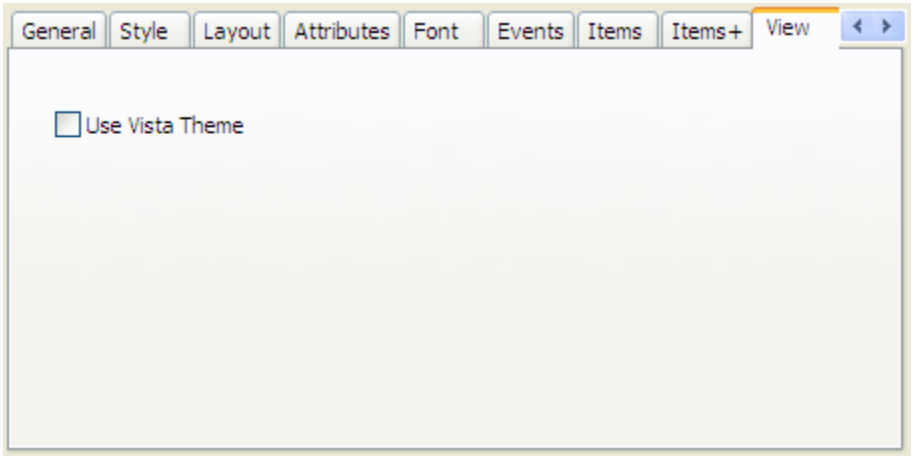


Illustration 113: Special Properties - View - for listbox gadgets.

If you are working on a PC with Vista OS then you may like to enable the Vista theme of a listbox.

7.9 TextArea

7.9.1 Standard TextArea

Multi line texteditor.

While in Design Mode (-> not in 'PreView Mode') the TextArea shows now the filename of the text loaded on startup in the upper left corner (only if it was selected of course). Thus you have a visual feedback if that setting was done.

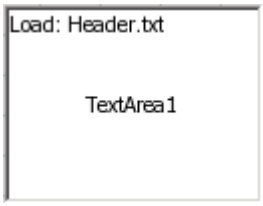


Illustration 114: TextArea Gadget - load a file on creation.

Normally the text for the TextArea is loaded from a file on start or maybe set by code at a later state, but sometimes you need only a few lines. Instead of setting this in an extra step in the GadgetIni file you can do it during setup of the gadget in the Properties Editor (only for very short text). This is simple and fast and gives also a better impression of the later view.

7.9.2 Special Properties

7.9.2.1 Style

Illustration 115: Special Properties - Style - for textarea gadgets.

Select the style of the textarea.

Wordwrap

Makes long lines of text flow onto following lines.

Read Only

The user is unable to modify the text.

7.9.2.2 Value

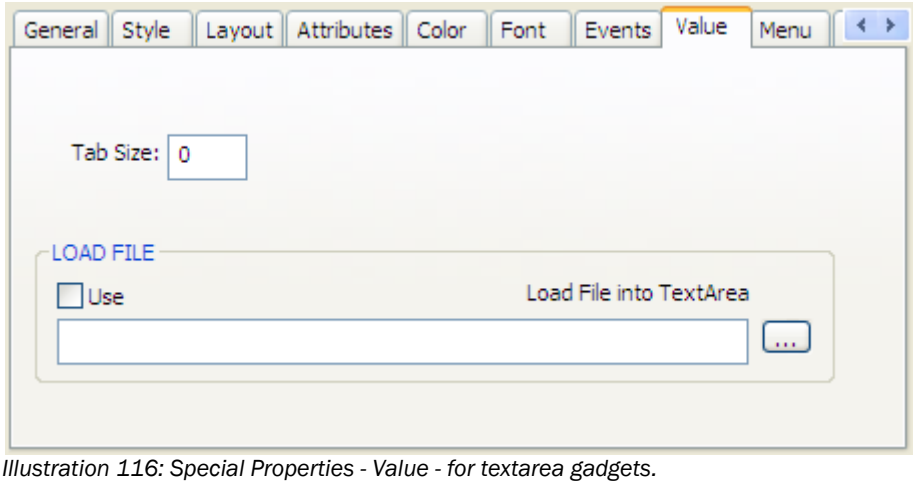


Illustration 116: Special Properties - Value - for textarea gadgets.

Tab Size

Set the tab size of the textarea. Zero means no change.

Load File

If you like to load a certain text into the textarea right after the creation to have it immediately available, use the load file option.

7.10 HTMLView

7.10.1 Standard HTMLView

A web browser object.

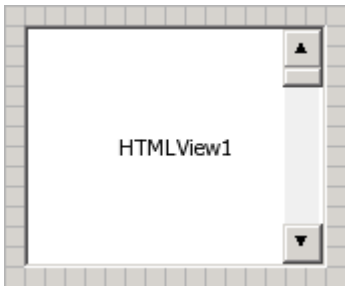


Illustration 117: HTMLView

7.10.2 Special Properties

7.10.2.1 Style

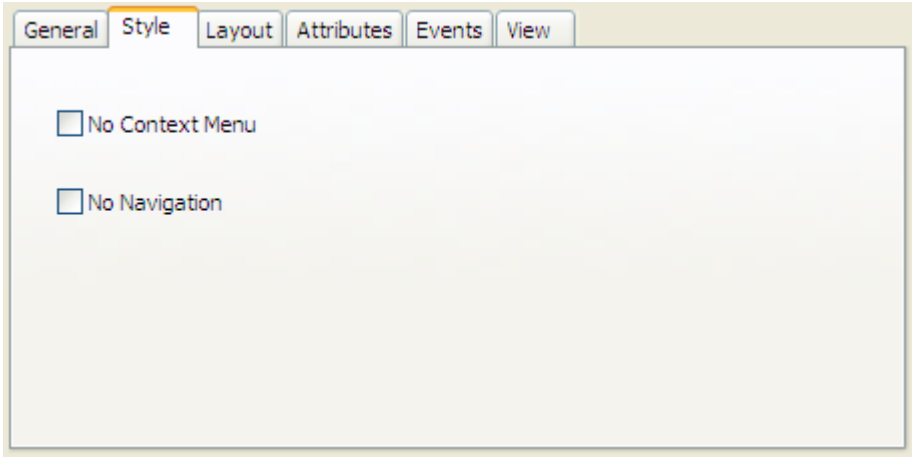


Illustration 118: Special Properties - Style - for htmlview gadgets.

No Context Menu

The HTMLview's default context menu is disabled.

No Navigation

User navigation is disabled and events generated instead, thus you act yourself with a certain action when a user clicks on a link.

7.10.2.2 View

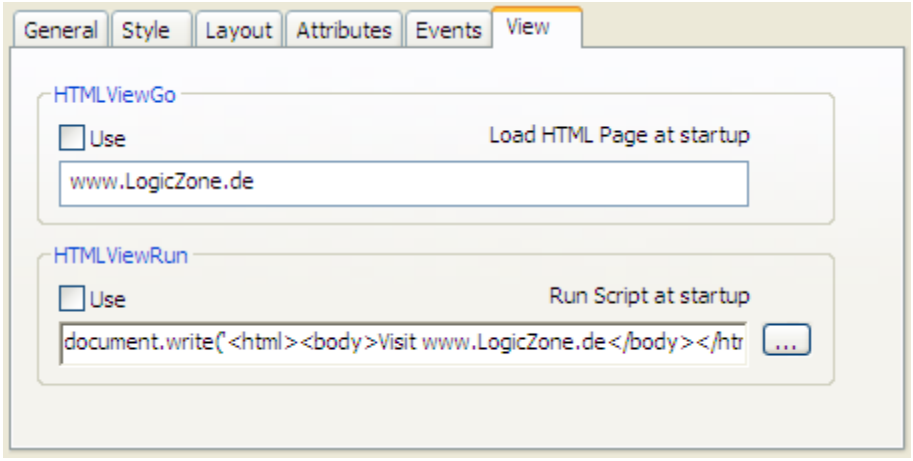


Illustration 119: Special Properties - View - for htmlview gadgets.

HTMLViewGo

Set the initial URL of an HTMLView gadget after gadget creation to immediately visit a website.

HTMLViewRun

Run a script in this HTMLView gadget.

7.11 Progress Bar

Illustration 120: Progress bar

7.11.1 Standard Progress Bar

A progress bar...

7.11.2 Special Properties

7.11.2.1 Value

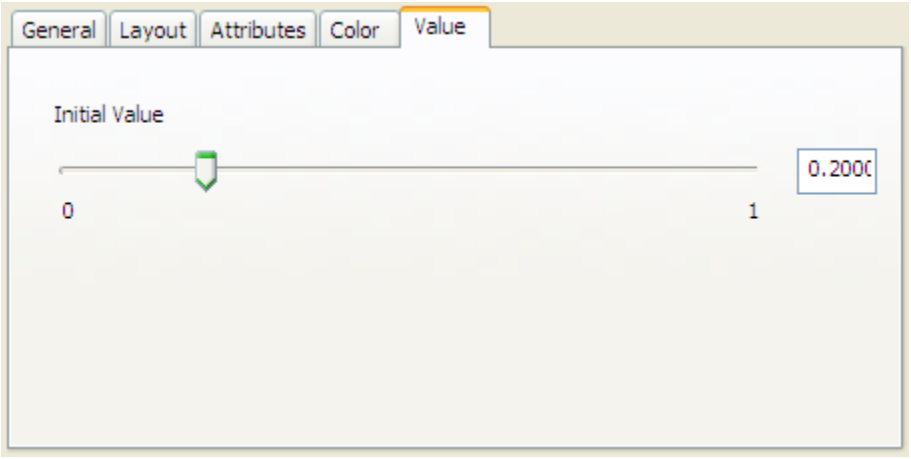


Illustration 121: Special Properties - Value - for progress bar gadgets.

Initial Value

Set the initial value the progress bar should start with right after creation. Use the slider or type the value directly into the textfield. Only values between 0 and 1 are allowed.

7.12 Canvas

7.12.1 Standard Canvas

A graphics context for real time drawing.

The canvas can deliver an EVENT_GADGETPAINT event, whenever it wants to be redrawn. This event is often the place for your own update routine. Logic Gui initializes the canvas by default with SetGraphics and SetViewPort, this initialization string can be customized in the ini file if needed (see ini file explanation).

Illustration 122: Canvas

7.12.2 Special Properties

7.12.2.1 View

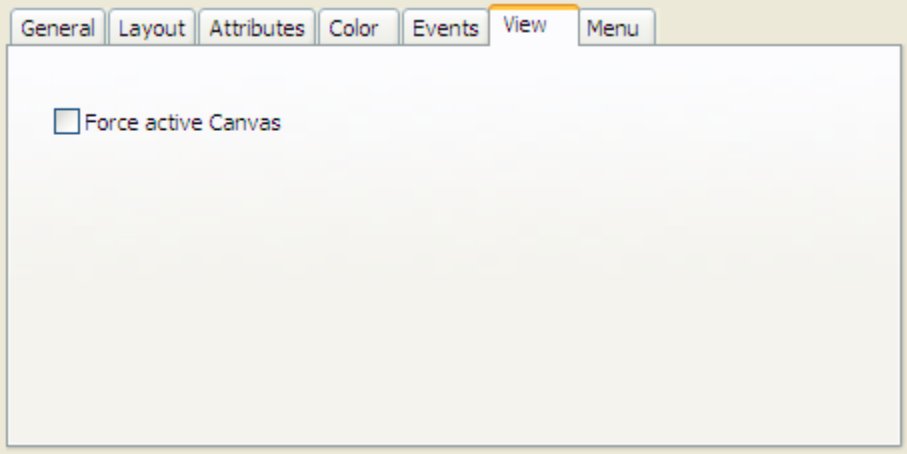


Illustration 123: Special Properties - View - for canvas gadgets.

Force Active Canvas

This option is on by default and does nothing else than activate the canvas right after creation to get all canvas events.

7.13 TreeView

Illustration 124: Treeview

7.13.1 Standard TreeView

An expandable list of nodes for hierarchy information.

7.13.2 Special Properties

7.13.2.1 Style

An undocumented Drag and Drop feature for treeviews is available and implemented in Logic Gui. There is probably a good reason this is not yet released (not cross platform and such ...) so use it with care, but nevertheless I created already the needed structure, thus you can use or play with it. You will find also two new event types in the Event tab for this.

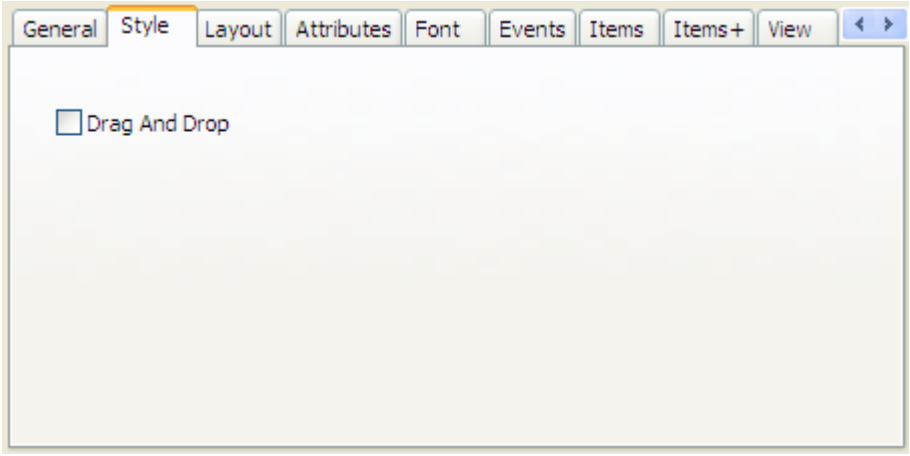


Illustration 125: Special Properties - Style - for treeview gadgets.

7.13.2.2 View

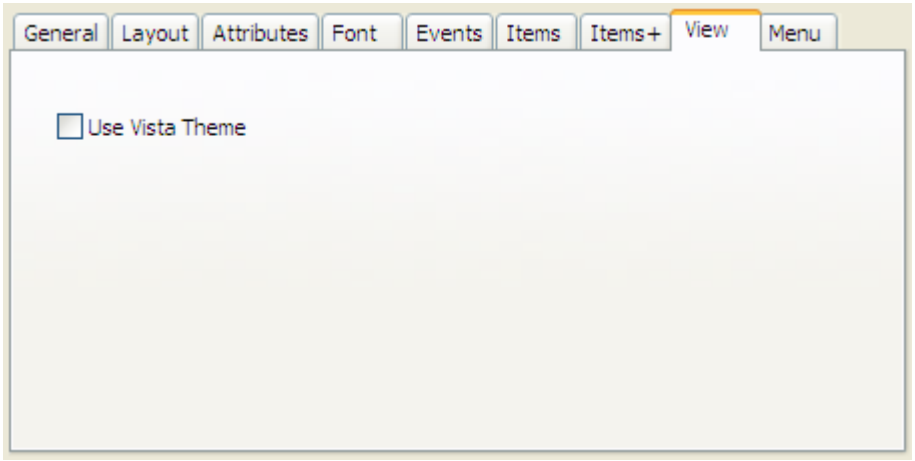


Illustration 126: Special Properties - View - for treeview gadgets.

If you are working on a PC with Vista OS then you may like to enable the Vista theme of a treeview.

7.14 Tabber

7.14.1 Standard Tabber

The tabber provides a list of tabs. While MaxGui creates only this list of tabs, Logic Gui can also associate a panel to every tab and switch automatically all your gadgets on top, while switching between the tabs.

Extra Tabs can be selected directly inside the form to switch them. You can put all Gadgets in every Tab as you wish, no extra work needed! Logic Gui will create the correct source to switch the gadgets during runtime. The Tabber supports also complete cloning. The Tabber itself, with all nested gadgets with all toolbars, menues... and Tabber in Tabber in Tabber.

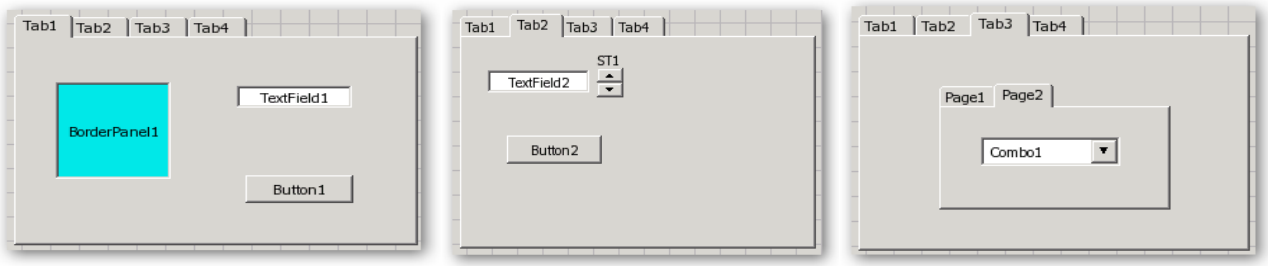


Illustration 127: Tabber Gadget

When resizing a tabber the panels inside also automatically resized.

A warning is displayed in the general tab when a tabber has no tabs defined and thus would not be managed by Logic Gui.

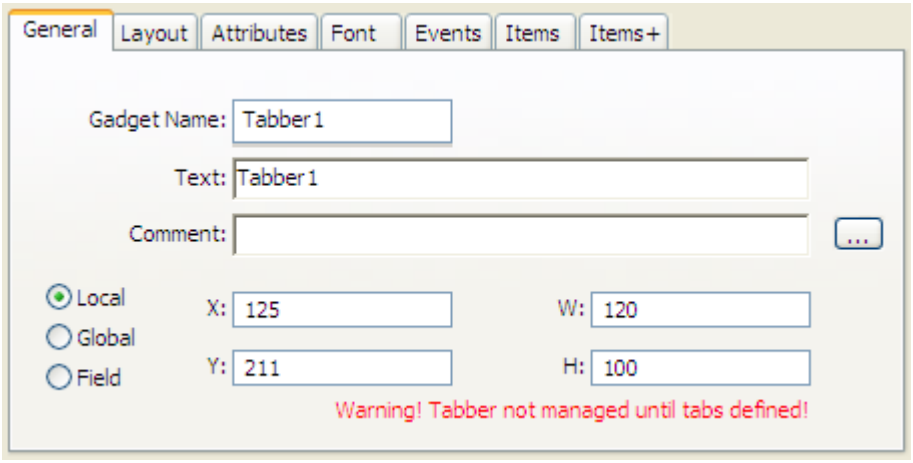


Illustration 128: Unmanaged Tabber (without tabs)

You can have managed and unmanaged tabber. A managed tabber is what you normally want, where all the setup is done from Logic Gui for you. An unmanged tabber is a tabber with no defined tabs in Logic Gui and thus you have to take care yourself in your code. The code generated by Logic Gui to handle a managed tab event is removed when using an unmanged tabber.

7.15 Proxy Gadgets

Proxy Gadgets are combinations of MaxGui gadgets, which form another useful gadget – same as the special gadgets, but official. All proxy gadgets are extended from the main TGadget type and need to be imported separately. Logic Gui will do the "Import MaxGUI.ProxyGadgets" for you automatically when at least one proxy gadget is in use.

7.15.1 HyperLink Gadget

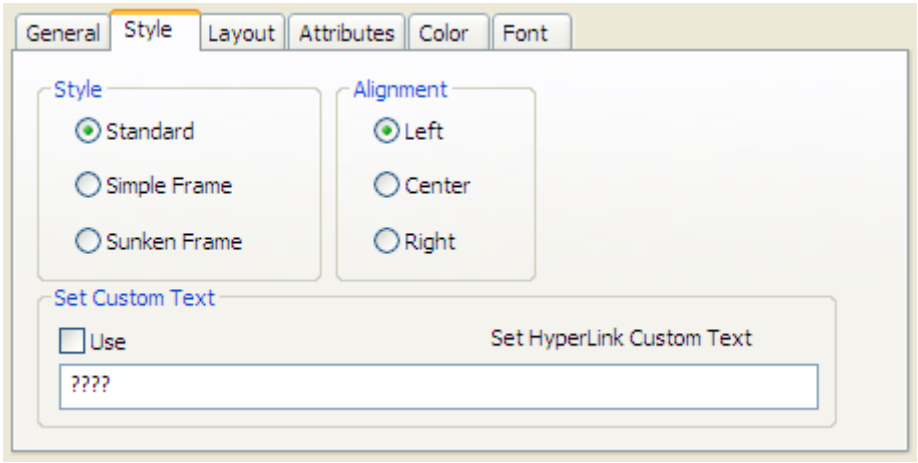


Illustration 129: Hyperlink Gadget - Style View

The HyperLink gadget is a label which calls Open_URL when clicked. You can use the label styles (except the separator) and the normal label alignment. In the style tab you can enter also an optional text for the HyperLink, which will appear as custom text instead of the URL itself. When chosen, the custom text is visible inside the form and you can do your adjustments. The color tab works a bit different for the HyperLink gadget, the foreground color sets the normal label color and the background color will be shown when you hover over this link during runtime. When no color is chosen the HyperLink is blue and the roll-over color is red (standard MaxGuiEx). Please notice that a HyperLink gadget has no events and no functions, everything is set up with the creation. The URL, which is the normal gadget text, and the custom text are designed as multi language able. Thus you can point with a certain language also to a web page with the same language. All custom text languages are also exported to the application xml file when in use.

7.15.2 Splitter Gadget (Proxy Gadget)

Underneath the ProxyGadget node of the gadget treeview you can find also the MaxGuiEx Splitter. Again two entries are available for horizontal and vertical direction. The default split is set to a 70/30 ratio, because the Proxy Splitter acts a bit different as the 'old' Splitter. The new Splitter has always a main panel and a side panel and the side panel by default can't grow over 50% of the available space. So, to differentiate between the main and the side-panel the main is fixed at 70% of the size. The created script retrieves the main and side-pane and puts all relevant gadgets on top. The split size is fixed to 10 pixel! You can set also a foreground color for the split itself, the background color has no effect.

Illustration 130: Splitter Gadget (Proxy Gadget) - Style View

In the Style tab you can also define if the main and side panes should be flipped, but again remember the

sides will flip automatically during runtime when you move the side over the 50%. And there is also another undocumented feature of the Proxy Splitter that when you click and hold down the mouse to drag the split and you move the mouse to the end of the split, the splitter switches between horizontal and vertical direction and vice versa (Limits were just removed in MaxGui SVN 114, see View tab below). When doing the design with the splitter you should decide beforehand the orientation, because the gadgets on top will not follow when you switch between horizontal/vertical or flipped/none flipped layout. When asking for a xml file the splitter will be exported with all relevant values. There is no gadget sensitivity for the splitter and thus the controls are greyed out. Please be aware that you must not mix the old splitter type and the new proxy splitter type as they use the same class name.

7.15.2.1 Special Properties (View)

With seven options you can fine tune the splitter behavior!

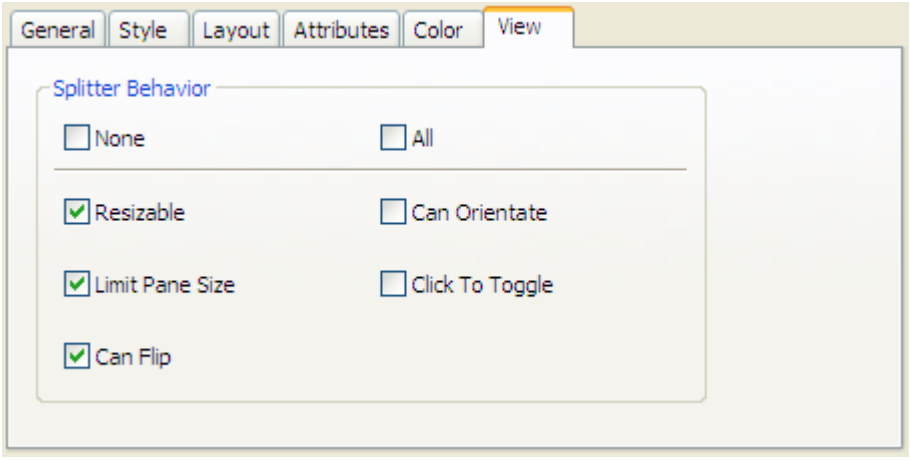


Illustration 131: Proxy Gadget Splitter - View tab to set the behavior flag.

7.15.3 ScrollPanel

The Proxy TScrollPanel from MaxGui 1.33 is available in Logic Gui, but because we didn't have an official ScrollPanel before in MaxGui, Logic Gui provided a ScrollPanel as 'Special Gadget' in the past. I will leave it as it is, but please keep in mind not to mix them, that is not supported.

7.15.3.1 Style

Illustration 132: Proxy Gadget ScrollPanel - Style.

7.15.3.2 View

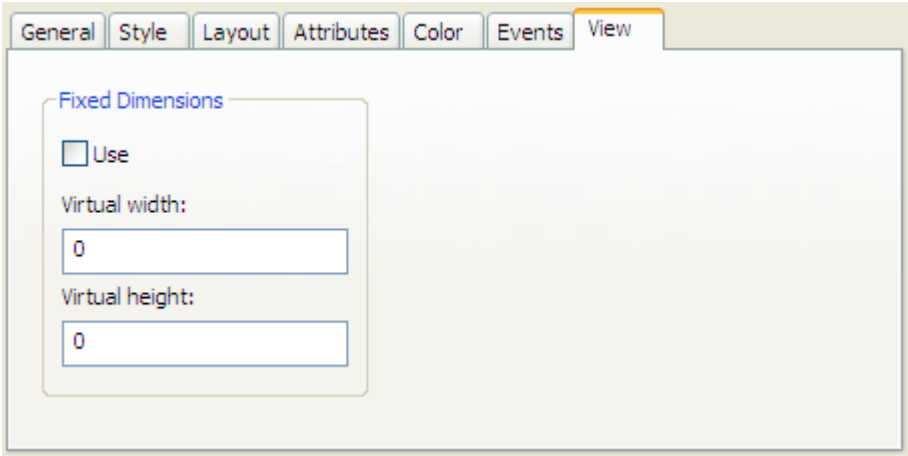


Illustration 133: Proxy Gadget ScrollPanel - View.

In the 'View' tab you can choose to use a fixed size for your scrollable clientarea. This is the bigger panel you scroll around.

The values visible are pre set for your comfort at the time you click ALT+Leftclick on the ScrollPanel (bottom right button), when you set up the size visually. You can set up manually of course also a bigger size. If you don't use a fixed size, Logic Gui uses automatically the FitScrollPanelClient command to set up the client area to the same size your gadgets on top uses.

The handling of the ScrollPanel inside the form is like we had it before, nothing changed.

7.16 Special Gadgets

These are gadgets unique to Logic Gui. They don't belong to MaxGui, but built out of combined MaxGui gadgets (Similar to the proxy gadgets).

7.16.1 Panel with Scrollbars

This is a panel with attached scrollbars (vertically and / or horizontally). If you need more space than available in your form, you can take this gadget to gain more virtual space.

You can define two different sizes, one for the gadget in the form and a second virtual size.

Illustration 136: ScrollPanel - virtual size not yet set.

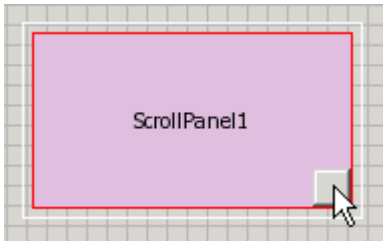


Illustration 135: ScrollPanel - virtual size set.

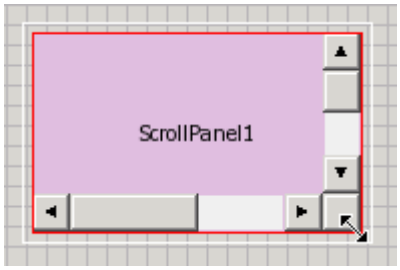


Illustration 134: ScrollPanel - virtual size is bigger than the visible size.

With vertical and or horizontal scrollbars you can then reach every region. You can move the virtual content in small steps when clicking on the arrows, or in big steps when clicking below or above the slider. Moving the slider will interactive scroll the content. Actually the ScrollPanel is more or less like any other container gadget, but has some special features. After placing the ScrollPanel on the form you will see a light green rectangle with a small button in the bottom right corner. At any time you can visual set the the virtual size of the ScrollPanel by clicking on this button while pressing down the ***ALT key****. As feedback the color will change to some purple one. If you resize this ScrollPanel now to a bigger one, you will recognize easily the border of your virtual area. If you resize to a smaller one, automatically scrollbars are generated.*

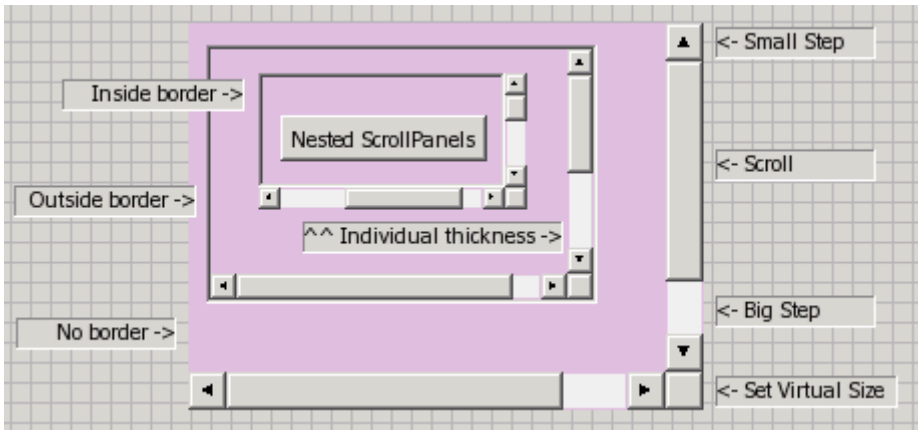


Illustration 137: ScrollPanel - three ScrollPanels of different type nested into each other.

To customize the ScrollPanel you can choose between a border outside, inside or none and the scrollbar thickness. To reflect all those possibilities in the source there is a ScrollPanel Type, which is then called during creation. This type is quite flexibel. Once created the type hooks itself in the eventqueue. This way all slider movements are reflected on the fly and not only when the mousebutton is released. But the ScrollPanel catches not only the slider movement, it catches also the window resize event. That means if you set the layout of the new ScrollPanel to resize with it's parent (e.g. window) then all sliders are updated immediately and they also disappear or re-appear when the window is big enough or shrunk again. Of course you can use this type also by your own code very easy.

As already mentioned the ScrollPanel is mainly a container gadget but behaves a bit different when resized. When resized at the scrollbars (right or bottom) the content is not selected and all gadgets inside will belong to the ScrollPanel even if they disappear, because the ScrollPanel was made smaller. If you want to resize the complete visible content also, then you need to resize at the ScrollPanel button at the bottom right corner.

The placeholder in Logic Gui works quite nice, but there is at least one drawback which you should be aware of. When you resize the ScrollPanel and a gadget does not fit anymore completely into the ScrollPanel this gadget will be hidden. This happens because it's needed for my recursive parser. The rule for the parser is, that everything needs to be in a container at least one pixel! What does that mean to you: If you e.g. move the scrollbars and a gadget is hidden, this place looks empty for another gadget which is in fact not true!! Either put all your gadgets on top of the ScrollPanel when the ScrollPanel is sized to it's max and shrink it afterwards or put your gadget and move the scrollbars to be sure that nothing else is covered.

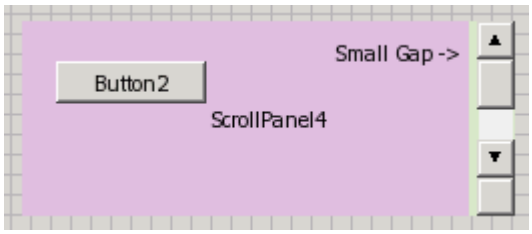


Illustration 138: ScrollPanel - with only one scrollbar.

If you need a ScrollPanel with only one scrollbar, this scrollbar should stay ***outside*** *the virtual panel (purple area). If you need both scrollbars you will always be inside the virtual panel, no problem.*

7.16.1.1 Special Properties (View)

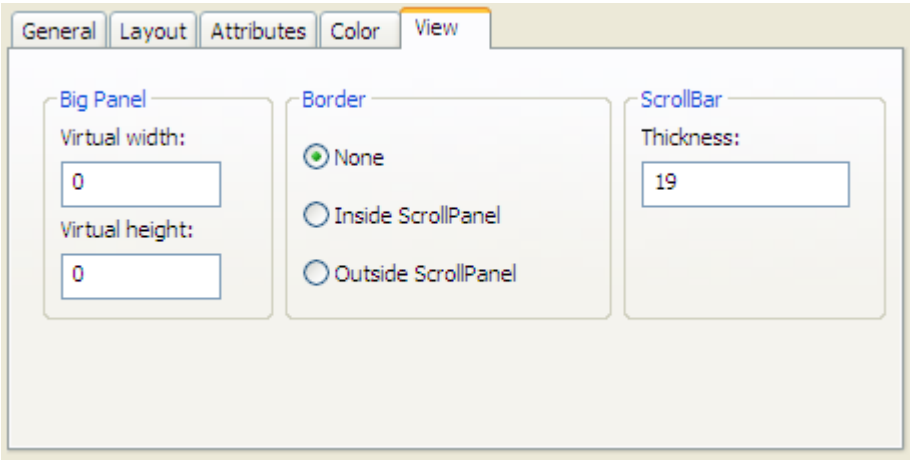


Illustration 139: Special Properties - View - for ScrollPanel gadgets.

The View tab is there to set the virtual panel size manually, thus possible to be a lot bigger than the screen or the actual form. The border type and scrollbar thickness are also set here.

7.16.2 Windows Only! / Multicolumn ListBox

The multicolumn listbox (ListView) will allow you to create a listbox, as the name already says with more than one column and a lot more. Actually it is a general purpose gadget which can be used for a lot of things, because you can switch the view to present the information in different ways. A demo and exported form file can be downloaded to visual checkout the possibilities the ListView gadget provides.

This multicolumn listbox needs the TListView type, which can be found in a subfolder in the Logic Gui application folder. The usage can be controlled in the Properties Editor/Application/Types tab. The type allows a few more options than available in the gui, if you like to use it for direct coding. Checkout the comments inside the code.

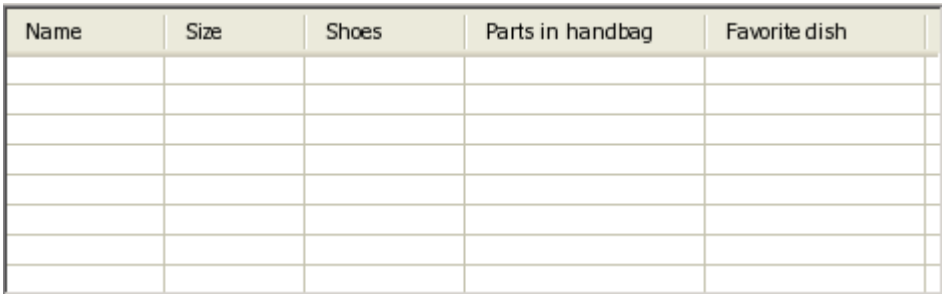


Illustration 140: ListView inside the form

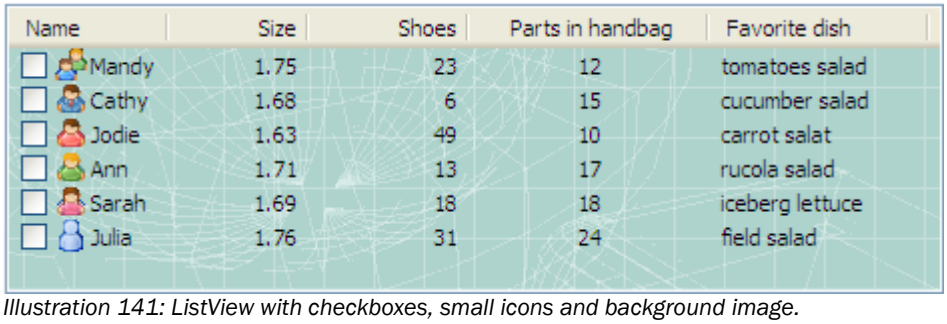

Name
Size
Shoes
Parts in handbag
Favorite dish
Mandy 1.75 23 12 tomatoes salad
Cathy 1.68 6 15 cucumber salad
Jodie 1.63 49 10 carrot salat
Ann 1.71 13 17 rucola salad
Sarah 1.69 18 18 iceberg lettuce
Julia 1.76 31 24 field salad

Illustration 141: ListView with checkboxes, small icons and background image.

Standard properties are ready to use for the ListView: General, Layout, Attributes, Color, Fonts, Events, Menu can be used as known. While Style, Items+ and View tab are different and will be explained below.

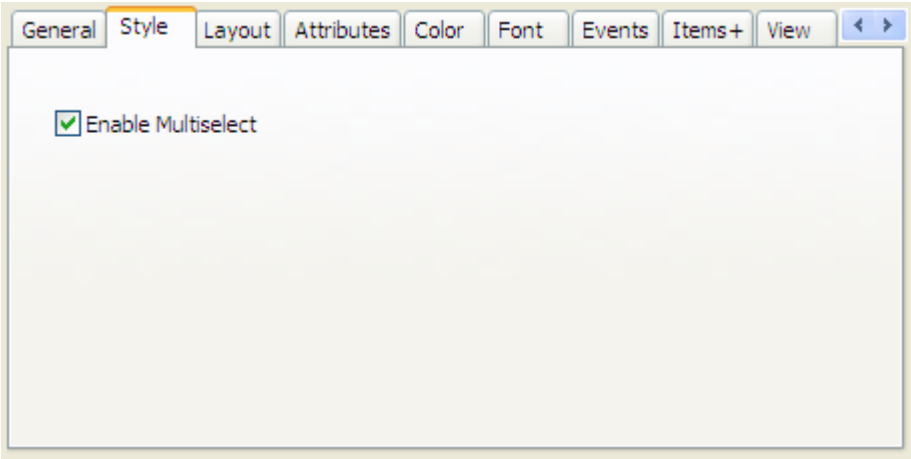


Illustration 142: Special Properties – Style – Enable MultiSelect

Enable MultiSelect allows the user to select more than one item in the ListView. Use standard shift click for a range of items to select, or ctrl click to add or subtract items from the selection.

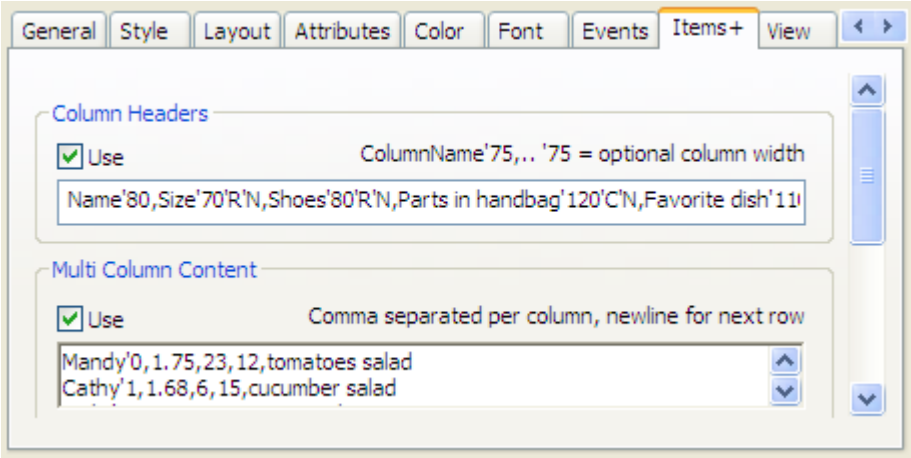


Illustration 143: Special Properties - Items+ - Part 1 of 2

Column Headers

All columns are separated by a comma. Additional options can be defined with a ' character.

Column'150 defines a column width of 150 pixel. When no width is given for a certain column, Logic Gui will calculate automatically one from the chosen text.

Other tokens at the end of the column name to customize the header behavior can be: 'L = column left aligned, 'R = column right aligned, 'C = column centered, 'T = text sorting, 'N = numeric sorting, 'S = selection sorting, 'B = checkBox state sorting. You can combine several settings in any order like this ColumnName'100'R'N = the column with ColumnName should be generated with a fixed width of 100 pixel, right aligned and numeric sorting.

This type of input is of course only meant for some very few lines, as i see the ListView actually filled by your code during runtime.

Multi Column Content:

You can enter some content for the multi column listbox. Enter the data comma separated per column and switch to the next row via a new line. You can use tabs to organize the input in the textarea, those tabs will later be ignored.

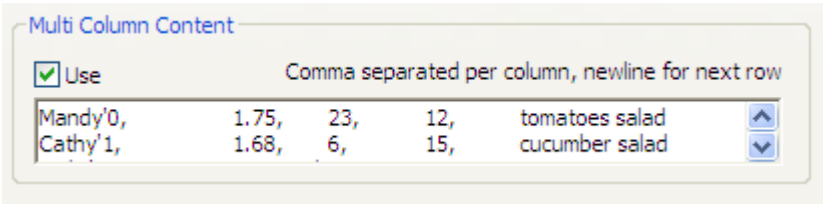

Multi Column Content
Use
Comma separated per column, newline for next row
Mandy'0, 1.75, 23, 12, tomatoes salad
Cathy'1, 1.68, 6, 15, cucumber salad

Illustration 144: Special Properties - Items+ - Content organized with tabs

In the Multi Column Content group you can define an optional icon by using the same syntax as in the column header. Append the icon number at the end of the item name like this: Item'5 = attach icon number 5 to the Item. The icon must exist in the chosen iconstrip and also in the optional large icon iconstrip. Small and large icons use the same index (start at zero).

Small IconStrip:

Small icons, for example 16x16 pixel, are used in SmallIcon, List and Details view.

Large IconStrip:

Large icons, like thumbnails, are used in Icon and Tile View.

The maximum size of the complete graphic depends of the available resource from Windows-GDI and OS and is ~ 32MB. That means under WinXP with a 32bit desktop resolution there is 2800x2800 pixel available.

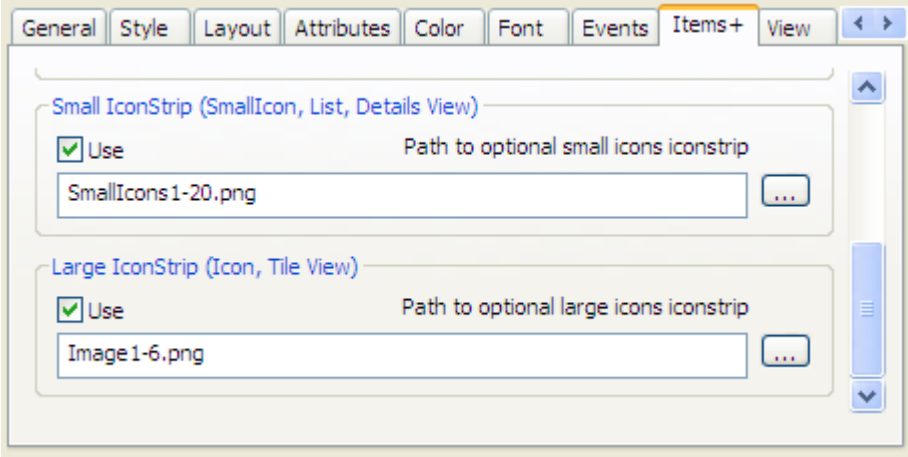


Illustration 145: Special Properties - Items+ - Part 1 of 2

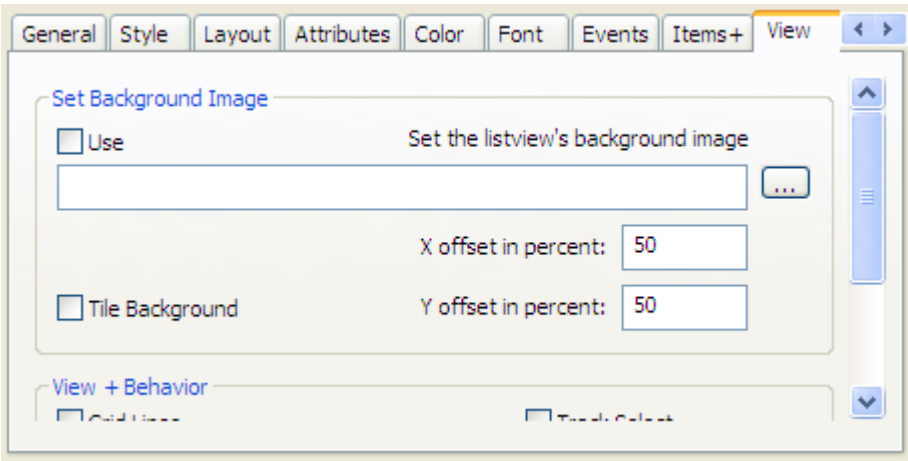


Illustration 146: Special Properties - View - Part 2 of 2

Set Background Image:

The View tab allows you to set a background image of the ListView. Extra options are: Tile Background, X and Y Offset in percent (0,0 = top left - 50,50 = centered image - 100,100 = bottom right)

***Note:** Only the path to the file in the filesystem is transferred and then used directly by the api. Unfortunately the reason you cannot use an incbin file for it!*

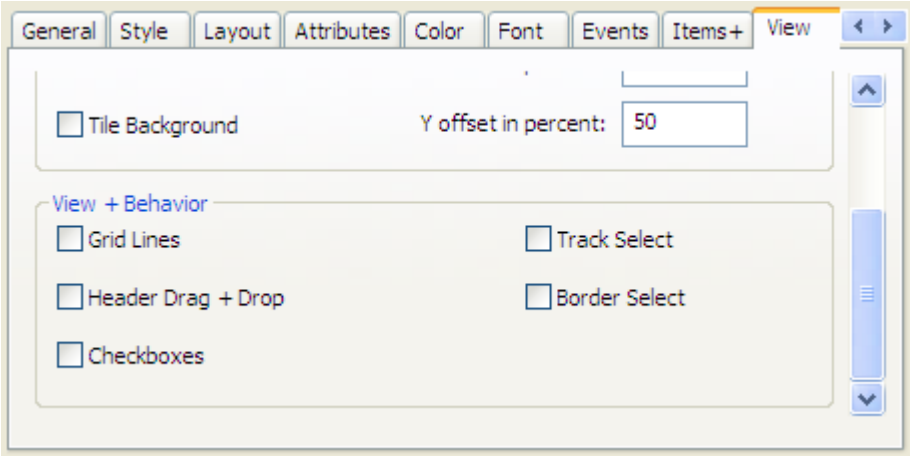


Illustration 147: Special Properties - View - Part 2 of 2

View + Behavior:

You can set different behavior of the ListView:

Grid Lines - switches on a grid between the items in Details View.

Header Drag & Drop - allows you to moves the columns.

Checkboxes - shows an extra checkbox in column zero or close to the icon, when in icon view.

Track Select - automatically selects the item under the mouse pointer after some delay.

Border Select - Shows a border around the icon, in icon view, instead of a selected icon.

7.16.2.1 Batch Processing

For ListView version 1.1. This new version contains the possibility to batch update the Listview without extra redraws in between and is a lot faster the more items you add. Thanks goes to impi07 for implementing this!

There are two new Methods for this:

Method BatchAddListViewItem(text$[])

Method BatchGo()

Example:

```
For Local i:Int = 0 To 1999

    ListView1_Type.batchaddListViewItem(["Julia" + i, " " + i, "31", "24", "field salad"])

Next
ListView1_Type.BatchGo
```

There are no extra settings inside the form as I don't think you will enter 2000 values there by hand, it's just for setting up the ListView by code.

7.17 SmartButtons

SmartButtons are very flexible image buttons © by LogicZone. They don't belong to MaxGui! SmartButtons can be assembled with the SmartButton Editor and saved as .smb file.

SmartButtons will consist out of one or more graphic files and a xml file which connects those together. The xml definition file will be read in by Logic Gui from a subdirectory (../SmartButtons) located in the Logic Gui folder. You can rename, delete or copy new buttons into this subdirectory, all changes will be detected on the fly when opening the SmartButton node in the Gadget TreeView!

Automatically import the SmartButton config into Logic Gui via double click on the treeview reference of the .smb file (inside the gadget treeview of Logic Gui added earlier), when adding the chosen SmartButton to your form. The main SmartButton picture is shown with the name of the file (if the SmartButton width is big enough) and a SmartButton number. Both texts will switch off in preview mode. When a SmartButton without picture is loaded, only a white box with frame is displayed in the defined size and "Pic?" text will be displayed.

Logic Gui creates the source code for the SmartButtons with all defined hotspot regions and related actions (incl. events and functions). Creation values can also be pulled from the external Gui.xml file if used. Of course the SmartButton module needs to be installed to run this code.

Logic Gui can add a defined menu as popup menu to a SmartButton (right click). A hotspot region needs to be defined to get the event fired, thus you are able to steer where the popup menu is possible. You can define an action for that region but you don't have to.

A SmartButton can also be a parent for other gadgets. Sometimes it's useful to have a SmartButton as background panel, other stuff should be then on top. To be able to produce the correct source in that case a flag in the attribute tab of the SmartButton is available 'Act as parent'. When selected the SmartButton will behave like any other container gadget.

The SmartButton filename can be found in the comment field of the SmartButton, thus you have a reference which config file was used. This is set only once when you add the SmartButton to the form, so you can use your own comment afterwards which is not overwritten again.

7.17.1 Independent Events

Although the SmartButtons can work completely independent because all actions will be started via hooks you are able to run your own code while using the events generated.

The EVENT_GADGETACTION Event is triggered when a region is left clicked. The event data contains the number of the region and the extra:object contains the region itself.

The EVENT_GADGETSELECT event is triggered when the mousepointer entered the SmartButton or a region. The event data contains the region number or 0 (zero) when the SmartButton is entered or -1 when the SmartButton is left. When a region is hovered the the region is again in the event extra object.

The EVENT_GADGETMENU event is fired when the user right clicks on a region. Event data contains again the region number and the event extra again the selected region.

The EVENT_GADGETOPEN event is generated when a mouse wheel up click is detected on a SmartButton region.

The EVENT_GADGETCLOSE event is generated when a mouse wheel down click is detected on a SmartButton region.

The EVENT_GADGETPAINT event is generated when the SmartButton timer ticks.

7.17.2 Config Files (*.smb)

Inside the Logic Gui program folder there is another folder called SmartButtons. This folder should contain all the SmartButton config files/folders written by the SmartButton Editor you want to use in Logic Gui. Files in this folder (and subfolders) are read in every time when the SmartButton node in the gadget treeview is opened and will be displayed underneath this Config Files node. A double click reads the config file and adds the SmartButton to the form.

7.18 Design only

7.18.1 Top Left Lines

This is a dummy gadget which does not produce any source output. It can be positioned in the form as helper object.

7.18.2 Horizontal Guide

Add a guide like you would add a gadget. All guides will be automatically placed in an extra layer, thus you can hide and show all guides by simply double clicking the layer. Guides won't produce any source output. If it's useful to move a guide into another layer, you can do so. Once added, the guides are saved with the form.

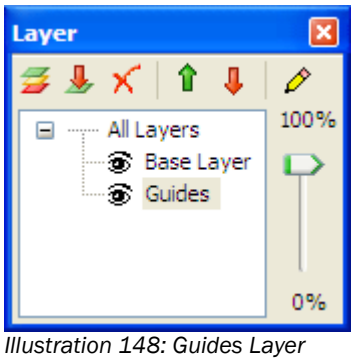


Illustration 148: Guides Layer

Guides can be selected by clicking on them and then be moved up and down or left and right. Use the Gadget Control Center to set a guide to a precise position. You can also lock a guide using the normal lock icon from the Gadget Control Center or via the popup menu.

When a guide is selected a small flag appears with the actual coordinate and when locked this flag changes it's color to red, to indicate that. Turn all flags of all guides on, independent of selection, in the Guides Menu.

When moving gadgets close enough to a guide the gadget will snap automatically, if 'Snap while moving' is enabled in the View Menu. The snap works in all directions, forward and backward.

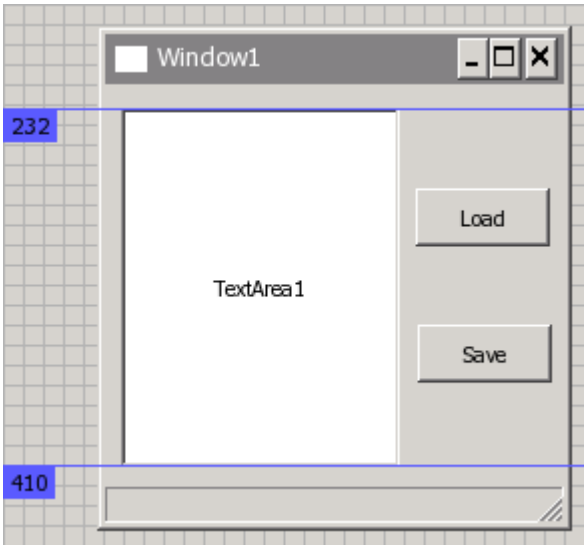


Illustration 149: Automatic distribution with guides - Load and Save button vertically distributed against the TextArea1 by selecting the guides as bounds,

Guides can also be used to align your gadgets and vice versa. What does that mean: You can align a gadget directly to a guide using for example the popup menu/align functions. Also Stretch and Trim may useful or distance control. A real highlight is the possibility to use the guides as bounds for the automatic distribution! But there is also something I forbid and that's the cut, copy, paste - this doesn't do anything with guides. On the other hand you can also adjust the position of the guide itself with the align functions, even 'Center in Form' makes sense here.

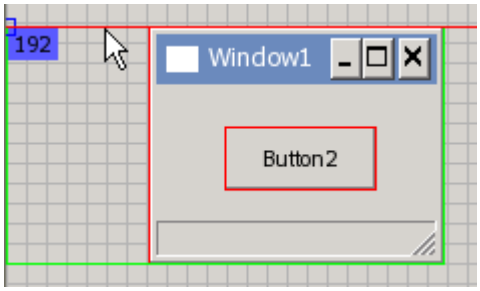


Illustration 150: Select snapped gadgets with Ctrl-Click

Once you moved the guide to a certain place and let some gadgets snap to it, you may want to move all together. Although you could do this with a multi selection, there is a shortcut which makes it even easier. Press CTRL and click on a guide to select all snapped gadgets in one go and move it to the new position, parents will select also it's children. You can switch this behavior also permanent on when choosing 'Auto connect gadgets'.

While a guide is selected and also the primary object in multi selection, the guide is drawn dark blue, while the normal color is a light blue.

Press ALT and click on a guide to switch the guide between horizontal and vertical style.

When enabled in the menu 'Snap while sizing', you can snap your gadget also during resizing. If you snap while sizing or while moving you can do so also with several gadgets (multiple selection), the whole group is adjusted with the primary gadget as reference.

The Design Range is also usable with guides and lets you quickly measure a certain distance from the guide.

Whenever a gadget should cover all the space between guides, you can use the 'Fit Inside Guides' function to stretch the selected gadget (primary only) to the maximum available space. If there is no guide before the end of the WorkSpace, the edge of the WorkSpace is the border! The function can be found under 'Inside a Container' in the popup menu.

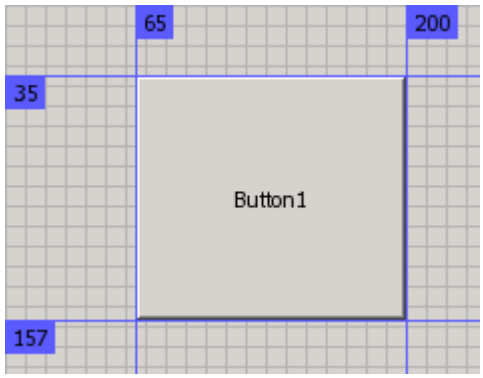


Illustration 151: Fit Inside Guides

Double clicking a guide does toggle 'the snap to this guide' on or off. To indicate the current state, the guides changes its color to dark green when snap is off

Green – Guide snap is switched temporarily off.

Blue – Guide snap is switched on.

Red – A red coordinates flag means this guide is locked (you can't move it by mouse).

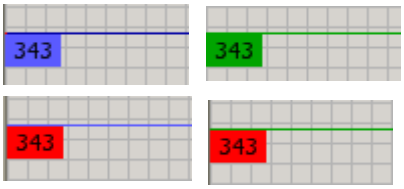


Illustration 152: Horizontal Guide

***Note:** Guides can simply be deleted by dropping them outside the WorkSpace, thus you don't have to use the keyboard.*

7.18.3 Vertical Guide

See Horizontal Guide.

7.18.4 Notes

You can add notes to your form. When you add a note and the cursor changes to the cross, click on a gadget you want to assign this note to. The note will be anchored to the gadget you clicked on! The note can be placed everywhere and a line points to the anchor, to show where this note belongs to. If you click on the WorkSpace the anchor is suppressed.

The note itself consists out of three areas. First, the note header, which is the text you can enter in the Gadget Control Center. Give it a short and descriptive name. Second, the info part, contains the user name and date and time when this note was added. Exchanging the form between several people, where everyone can left his own notes is just easy now. The third section is then the message body, text you entered in the comment of this 'note gadget'. You can resize the note as normal to fit all text inside.

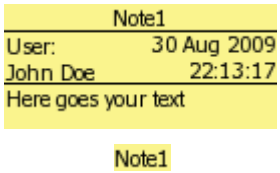


Illustration 153: Note

***Note:** When you double click on the header area of the note, the note toggles between a small minimized and the last full size version!*

All notes are put in a layer, the 'Notes' layer. So, to switch all notes just off during design, double click this layer. Of course you can assign this layer also a reduced transparency level, which may makes sense to see the underlying form.

As said above the note gets anchored to the gadget you clicked on, thus you can move the gadget where you want, the anchor will follow. Also the note can be moved or sized just normal and will always point to the gadget it was

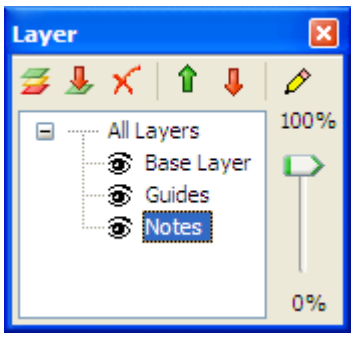


Illustration 154: Notes Layer

anchored to.

Notes will be saved with the form of course and don't produce any source code... I don't recommend to anchor to gadgets on tabber or ScrollPanel as their content is not always present, which may confuse.

The default color of a note is defined in the ini file:

Search for: <STANDARD_NOTE>

You can change it if the standard yellow hurts your eyes. Nevertheless this changes the color of all notes added to the form, but you can also change the color afterwards via the Properties Editor. A General and a Color tab waiting for your input... double click on the note text (not the header, that will toggle the note size).

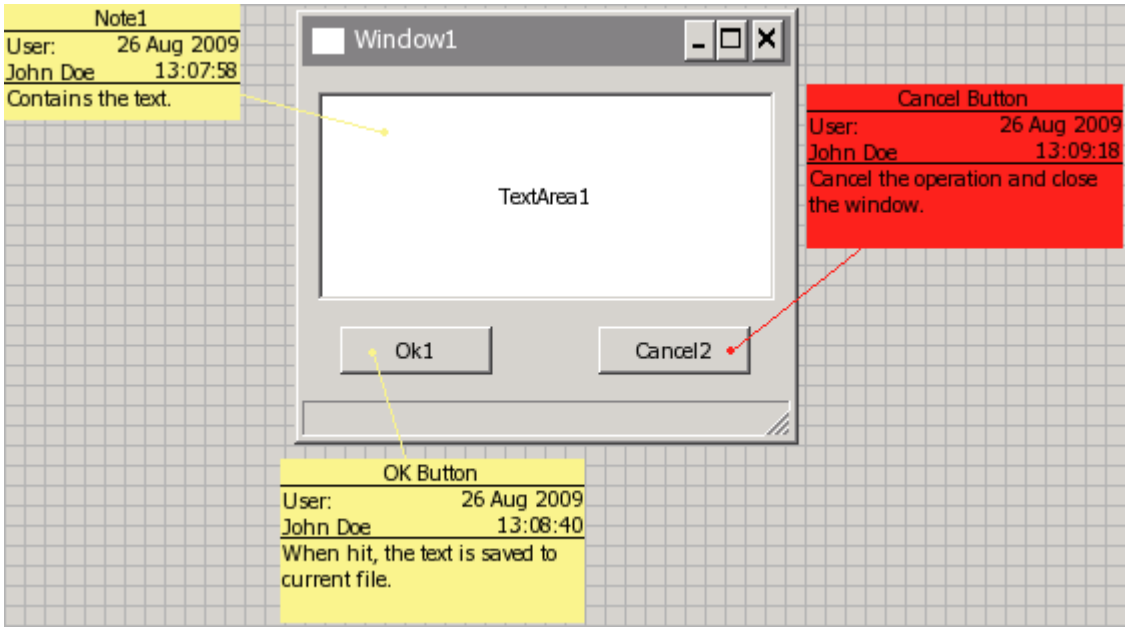


Illustration 155: Several Notes anchored to gadgets, one set to red color to indicate may something important

The anchor of 'Notes' are not drawn when the gadget it is anchored to, is not available or hidden.

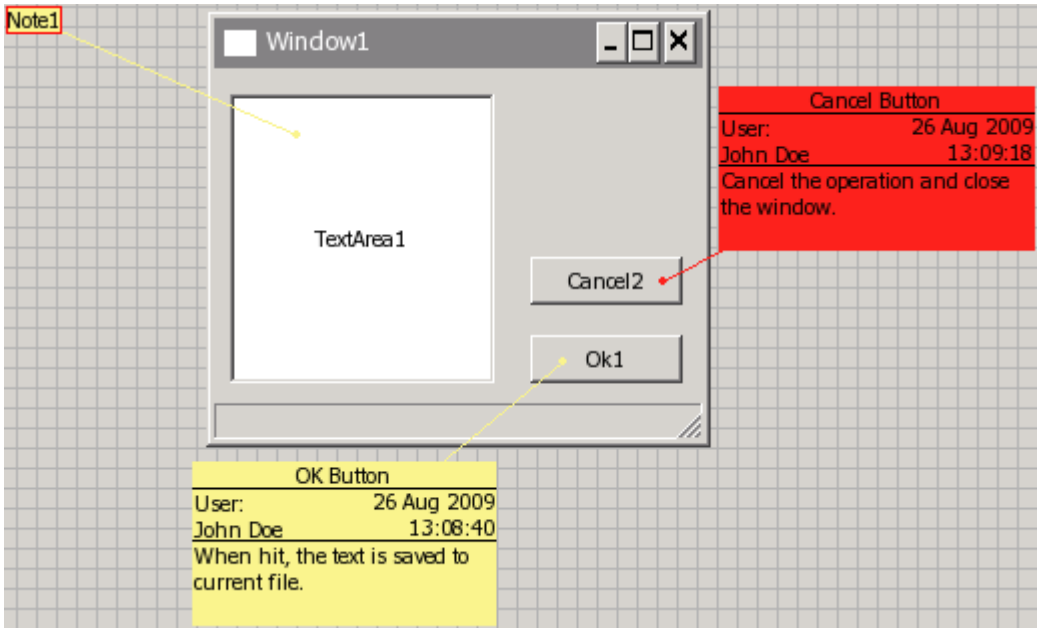


Illustration 156: Note1 is minimized, gadgets are moved - the notes anchor followed

7.18.5 Colors

The Color Note is similar to the normal note, it has an anchor pointing to the location where you clicked on. At that specific location the color is measured and the result is shown. This color note should help to adjust a gadget's color to the background they stay on, for example a SmartButton or a panel. The Color Note measures three different sizes, 1x1 / 3x3 / 5x5 pixel and calculates the average. The average of the 3x3 pixel area is also taken to draw a frame around the note, thus you can move the note to a certain point and check if the color matches with other objects. Additional those values are also written to the text header. When you shrink the note to it's minimized state you can still easily refer to the values. Again user and date/ time is recorded, so different user can annotate the form as they wish.

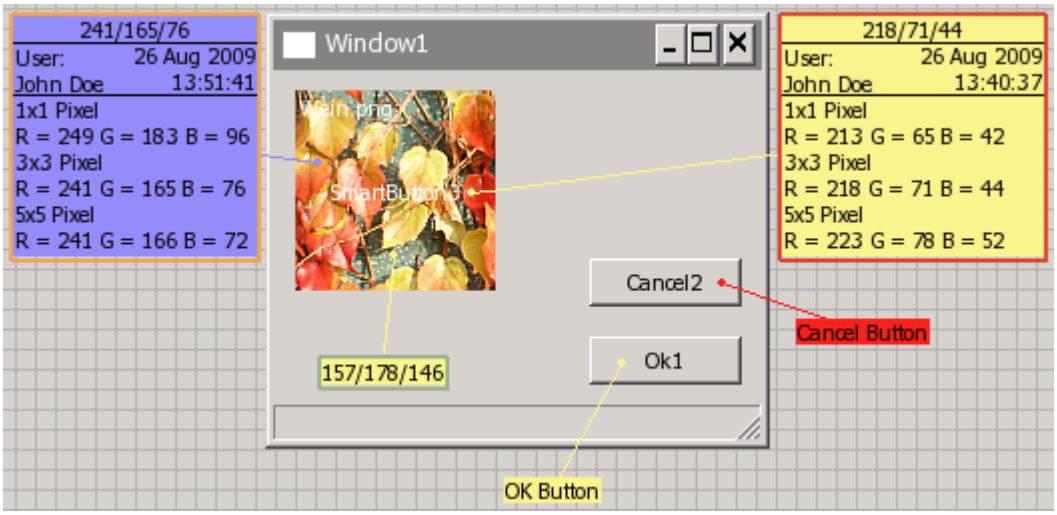


Illustration 157: Color Notes - The border shows the average color

7.18.6 Image

It is possible to add a simple image gadget. If you need a ScreenShot, a hand drawn and scanned in image or a drawing as background to create the correct design it is quite easy. Cloning an existing form or adjusting gadgets to an irregular shape is thus simpler than ever. You can either add an empty image frame and browse for a file, or you can drop an image into a predefined frame, or you can just drop an image onto the WorkSpace. When you use a predefined frame the image size is adjusted according to the image properties. If you drop an image, the size of the frame will be set to the size of the image and locked, thus you can't accidental change it. The image properties allows you setup the same as for panel images.

It is also possible to paste an image from the clipboard to the WorkSpace (windows). Use CTRL+V or 'Paste' from the popupmenu and the cursor will switch to a cross as normal. Click on the gadget you want to paste the image to, or click on the WorkSpace background to create a new Image-Gadget with the chosen image as content. As the clipboard holds only some temporary content the image is saved as file with the name of the gadget you chose in the form directory (png format). Not every image format stored in the clipboard can be converted to a pixmap and pasted, try out if it works with your application!

7.19 Legacy Gadgets

As MaxGui grows, some of the old Logic Gui gadgets are not really needed anymore or superseded. As you may still have some of them in use, they are parked here. Support is stopped for newer MaxGui versions, thus they might not work anymore.

7.19.1 Splitter Horizontal

Splitter gadget with top and bottom area, where you can put your own gadgets and a split handle in the middle which you can move to make the top or bottom area smaller and bigger. Your gadgets on top move or stay accordingly (as set with the layout function).

When inserted you will see two colored areas, separated by a split. The splitter is of course a container gadget and acts accordingly. Put your gadgets on top as needed. At any time you can change the split position by click and drag on the split area itself. If you lock at least the "Size" then also the split postion will be locked and cannot be moved by mistake. As usual till now you can have again nested container also with splitters.. or splitter in splitter.

The Splitter supports Source Properties like: General-Settings, Style - that means you can switch between horizontal and vertical on the fly and set the split size, Layout - the splitter can have it's own layout behaviour and thus moves also with any container it is in, Attributes - you can hide or disable the splitter (no split move, all nested gadgets disabled), View - allows you define a border for the complete splitter or any subpart, so you don't have to put another border panel on top to have them. The splitter creates some event structure on top of the event queue as it uses "raw" events and has it's own event queue in it's own TSplitter type (example code from skidracer - changed to be SuperStrict comp.). While the splitter is a dynamic thing in your form it is absolutely needed to set the correct layout behavior of the nested gadgets (e.g. for a full TextArea Gadget which resize with the splitter, set all edges to "Align").

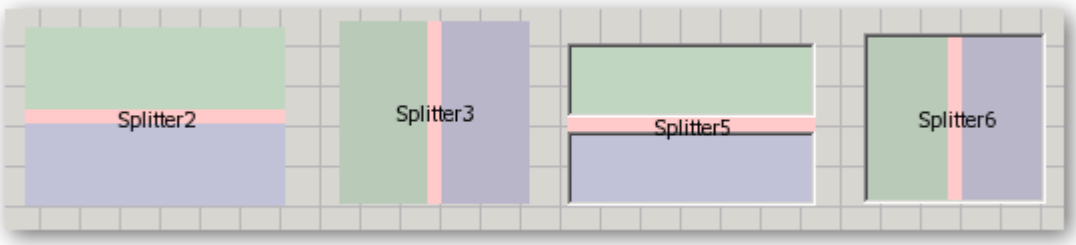


Illustration 158: Splitter - horizontal and vertical Splitter inside the form.

Example of Horizontal and Vertical Splitter with and without some borders.

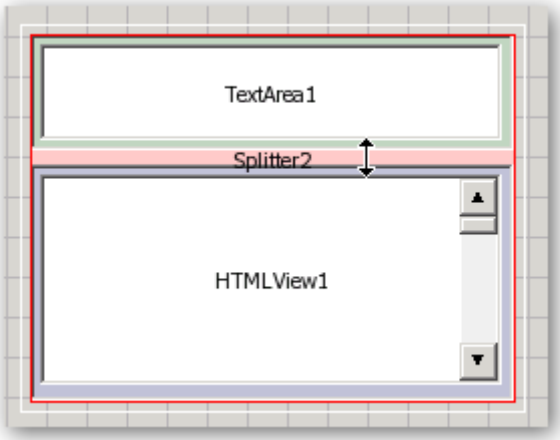


Illustration 159: Splitter - with textarea and htmlview.

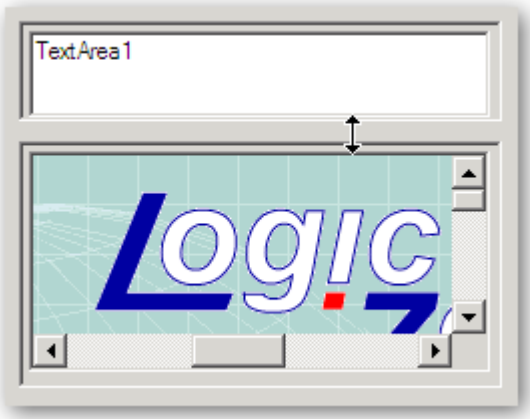


Illustration 160: Splitter - compiled (W2k style).

Example of a textarea and a htmlview on top of a splitter, once in the gui and the result.

7.19.2 Special Properties

7.19.2.1 Style

Illustration 161: Properties Editor - Style - of a Splitter gadget.

Set the general direction of the splitter and the split size.

7.19.3 View

Illustration 162: Properties Editor - View - of a HORIZONTAL Splitter gadget.

Enable the panel border for any of the Splitter panels if you like it.

7.19.4 Splitter Vertical

Splitter gadget with left and right area, where you can put your own gadgets and a split handle in the middle which you can move to make the left or right area smaller and bigger. Your gadgets on top move or stay accordingly (as set with the layout function).

See also Splitter Horizontal for more information.

8. Tool Windows

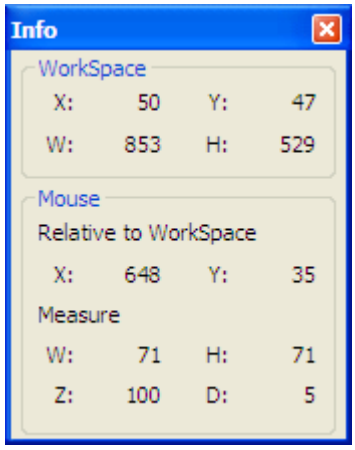


Illustration 163: Info window.

8.1.1 The Info Window

If not yet visible select in the View Menu -> Info Window

The Info Window is meant to give you just a quick overview.

WorkSpace X,Y coordinates and W,H for width and height.

The actual mouse position relative to the top left corner of the WorkSpace. While moving it's updated immediately.

The mouse measure part starts counting the Width and Height and Z is the diagonal of it, when creating a frame.

The last parameter is D and stand for the Design Range. This is the same Range we could change in the defaults – here the current value.

8.1.2 Step & Repeat

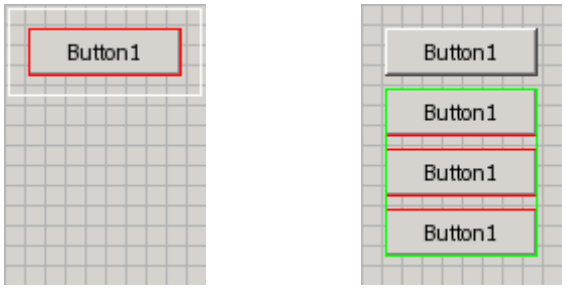


Illustration 165: Step & Repeat – Button1 vertical.

Sometimes you need the same type of gadget more often and distributed with same distance. In that case you could use Step and / or Repeat.

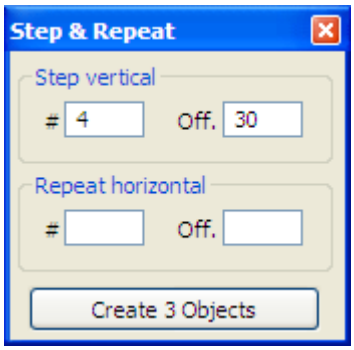


Illustration 164: Step & Repeat - vertical.

In the following example i selected Button1 and choose to Step it vertical.

I open the Step & Repeat Window and put a four in the "Step vertical" Number field and a 30 pixel as offset (Off). The offset counts from the top left corner.

As result you will get three (not four!) new buttons, immediately selected if you want to move them somewhere else.

Every new button gets an extension _c2 to the name.

The _c stands for copy or clone and the number is just one counter of the gadget type.

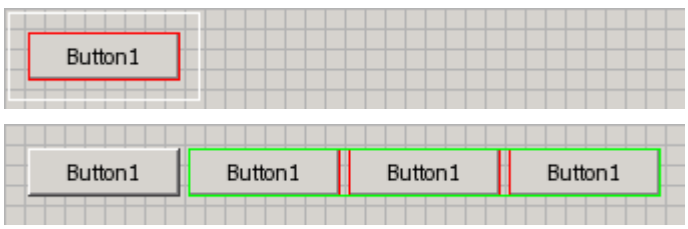


Illustration 167: Step & Repeat - Button1 horizontal.

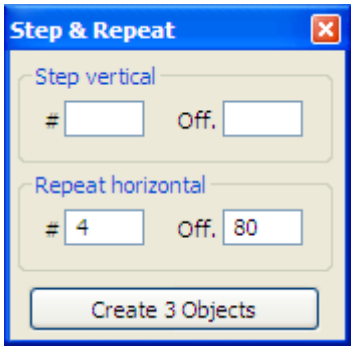


Illustration 166: Step & Repeat - horizontal.

Here is the result of repeating button1 horizontally.

If you like, you could also here put a simple formula into any of the textfields (to calculate may be the offset: size of gadget + extra space...).

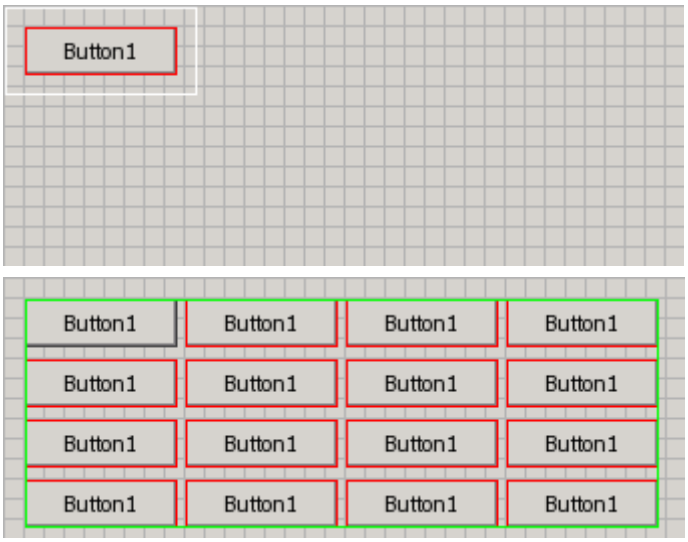


Illustration 168: Step & Repeat - Button1 vertical and horizontal.

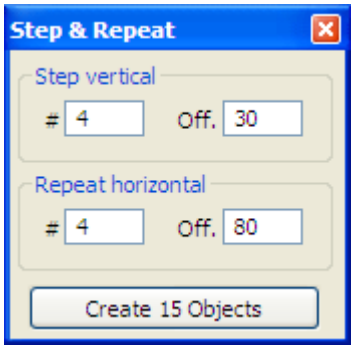


Illustration 169: Step & Repeat - vertical and horizontal.

And here is an step and repeat together. Now you see why it's important that Step and Repeat always count it's original together with it's copies.

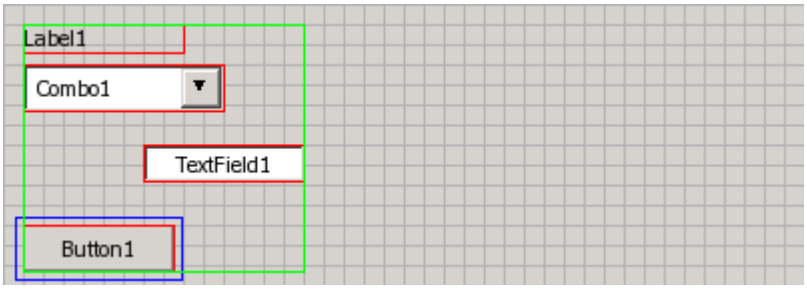


Illustration 171: Step & Repeat - multi selection start.

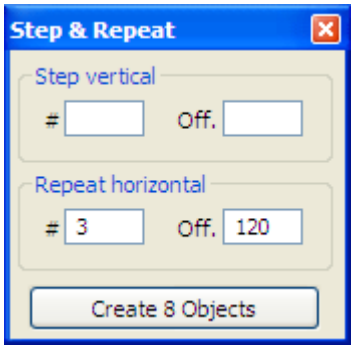


Illustration 170: Step & Repeat - selection.

This very good tool does not work with single gadgets only. You can select as much elements as you want, but be careful how many copies you are creating! The result of a repeat is below. It can be a huge time saver when needed. The create button shows always how many gadgets will be added to the form.

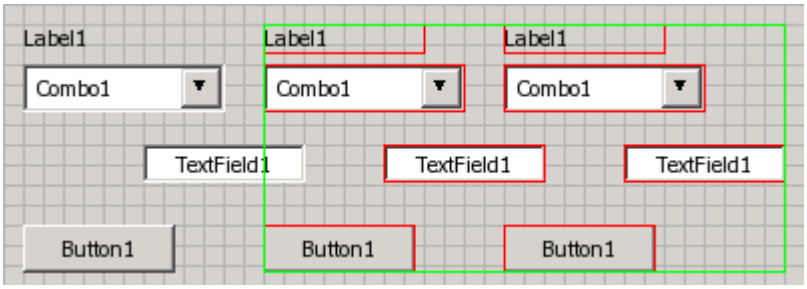


Illustration 172: Step& Repeat - multi selection result.

8.1.3 The Grid Window

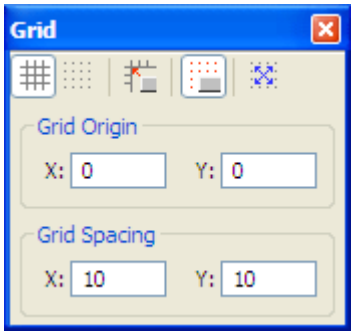


Illustration 173: The Grid Window.

The grid window lets you customize a grid which helps you to arrange your gadgets.

We have three sections in the grid window. A toolbar, grid origin and grid spacing.

The toolbar consist out of five icons, which can be switched on / off individually and represent different functions.

8.1.3.1 Lines

Grid lines are the default in Logic Gui.

Illustration 174: Grid - grid lines

8.1.3.2 Dots

If you like dots as a grid, choose this one.

You can also mix lines and dots if you want the intersections a bit darker!

Illustration 175: Grid - grid dots

Illustration 176: Grid - grid lines and dots

8.1.3.3 Snap to Grid

The snap works in all directions. When moving or sizing in a certain direction the gadget snaps to the grid when close enough to the grid (below threshold (in ini file)). Be aware that the grid has the lowest priority. Guides have the highest priority and gadget to gadget snap medium priority.

8.1.3.4 Grid Foreground / Background

You can have the grid in the background, thats the default, and also in the foreground. To have the grid in the foreground can be quite useful, when you want a grid on top of a container gadget.

When using grid lines on top of the form a lower alpha value is used. Nevertheless i found lines better in the background and dots in the foreground, but checkout whats your preference.

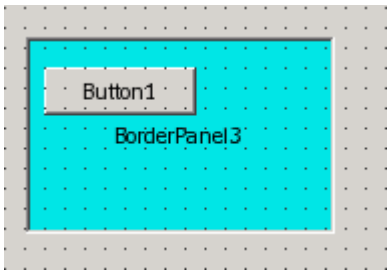


Illustration 177: Grid - dots in foreground.

8.1.3.5 Grid Auto Hide

When enabled it shuts off the grid and will only be automatically visible while moving or sizing a gadget. The state of "Always On" and "Auto Hide" is saved to the ini file for the next session.

8.1.3.6 Grid Origin

The grid origin lets you choose the starting point of the grid.

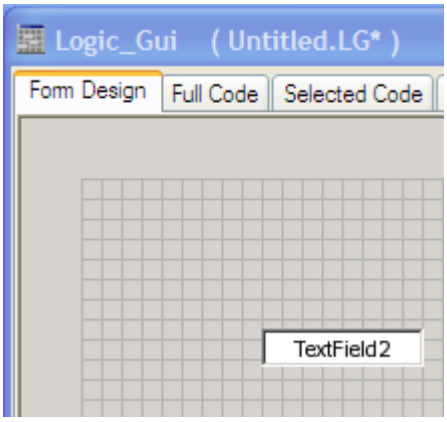


Illustration 178: Grid - grid origin.

8.1.3.7 Grid Spacing

The value used in the grid spacing is immediately shown in the WorkSpace. A value of two is the smallest. Of course x and y don't have to be the same.

With a big x or y spacing you can have only horizontal or vertical lines, if that makes sense in a certain situation – works quite good together with snap, to move gadgets along a line.

Illustration 180: Grid - vertical lines.

Illustration 181: Grid - horizontal lines.

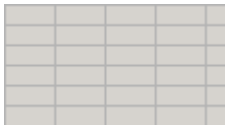


Illustration 179: Grid - different x and y spacing.

Note: *You are able to put a simple formula as well in any of the textfields to let Logic Gui calculate the origin or spacing.*

8.1.4 Gadget Control

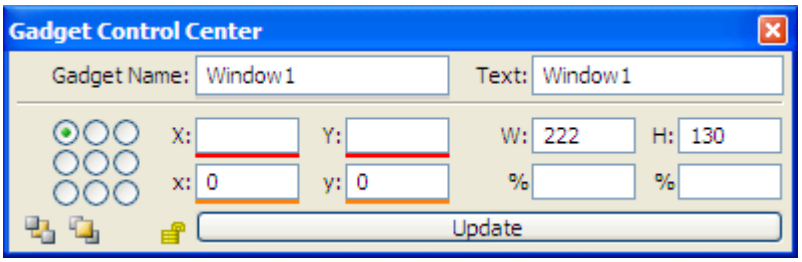


Illustration 182: Gadget Control Center Window

The Gadget Control Center window is used to set the most common gadget values in one go.

The following controls can be used:

1. *Gadget Name = variable name used in the source code. The label color does reflect the gadget variable definition. Local=green, Global=orange, Field=blue.*
2. *Text = text or title of a gadget. Gadgets which don't use any text get a dummy title for the form only.*
3. *Radio Buttons = Every button stays for a gadget edge and the middle one for the center. The coordinates use the selected radio button as reference. As default is the top left corner selected, means the X and Y coordinates shown reflects the top left corner of the gadget. If you enter new coordinates then the top left corner is set accordingly. But not only X and Y, also W and H use this reference. If you set a new width or height then the selected edge is the anchor!*
4. *X = X-coordinate*
5. *Y = Y-coordinate*
6. *W = Width of the gadget.*
7. *H = Height of the gadget.*
8. *x = x coordinate measured from the parent the gadget sits in.*
9. *y = y coordinate measured from the parent the gadget sits in.*
10. *% underneath W = enter a new width in percentages.*
11. *% underneath H = enter a new height in percentages.*
12. *Some Quick Access Icons where you can directly click on.*
13. *Update = takes the values entered and alters all selected gadgets in one go. RETURN is the shortcut.*

Illustration 183: Gadget Control Center - Quick Access Icons (single selection)

Illustration 184: Gadget Control Center - Quick Access Icons (multi selection)

8.1.4.1 Using the Gadget Control Center

Select a single gadget and observe the values in the Gadget Control Center window. The coordinates are shown and how big it is (width and height). You can now easily move or size the gadget with precise values. This is a fast and efficient input of coordinates. If you don't like to use the mouse because it is not precise enough this window is your friend.

Every radio button stays for a side/edge of the selected gadget. As default the top left radio button is used. But when you select now a different one, the coordinates displayed are automatically updated.

You can enter a new position or a new size and click on Update button or hit RETURN or Tab to the next field. To have some more comfort you are able to do simple calculation in every textfield. That means +-/ . If you combine that with the power of the radio buttons which corresponds to a certain side or edge, you can select the upper middle radio button and type 640/2 (windowsize divided by 2) and the gadget is autmatically positioned in the middle of the window.*

The X and Y textfield is additional able to do relative positioning. So if you type -5 the gadget is moved from the original position -5 pixel. If your gadget is close to another object and with a short check with the Design Range (use MouseWheel) you need to move a few pixel, this is now that easy. If the first character is a + (plus) or a – (minus) than relative positioning is assumed.

When you select a single gadget you can delete the text (for an empty label for instance), but you can't for a group of gadgets.

In the Gadget Control Center Window you will see an remark that more than one gadget is selected. X and Y are now representing the x and y of the green selection frame. The same applies to the width and height, they show the complete size of the selection. If you change the width, all selected items will get the same width! Even the text is spread to every gadget but not the Gadget Name as it is forbidden to have two times the same variable name. As you can see this is a powerful tool to update a lot of gadgets in one go.

***Note:** A line break is shown as '~n' and a tab as '~t'. As well you can also enter those shortcuts (mainly for labels) in the 'Text:' textfield.*

***Note:** A textfilter is in place for the gadget name in the Gadget Control Center allowing only correct characters entered, but suppress copy.*

***Note:** When you position a gadget inside it's container at 0,0 or lower, an orange alert indicator will be shown underneath the x,y (small x,y -> offset to parent), because your gadget are may cut by the parents client area.*

8.1.4.2 Quick Access Icons

They are used to directly accessing a function without opening the menu.

When a single gadget is selected you can bring this to front or send to back via direct access icons in the Gadget Control Center. The lock shows the current lock status and a click on it toggles between lock and unlock.

Illustration 185: Gadget Control Center - Quick Access Icons - Bring to Front - Send to Back - Lock/Unlock

When multiple gadgets are selected you can group/ ungroup or lock/unlock them via the corresponding icons in the Gadget Control Center as well.

Illustration 186: Gadget Control Center - Quick Access Icons - Group/Ungroup - Lock/Unlock

8.1.4.3 Distance Control

Another nice feature of the Gadget Control Center is the distance control. That means you have full control over the distance between gadgets!
How does it work:

If you selected more than one gadget, the Gadget Control Center switched already the quick access icons for grouping and locking. Additionally the label name of the x: and y: (Small letters -> Container

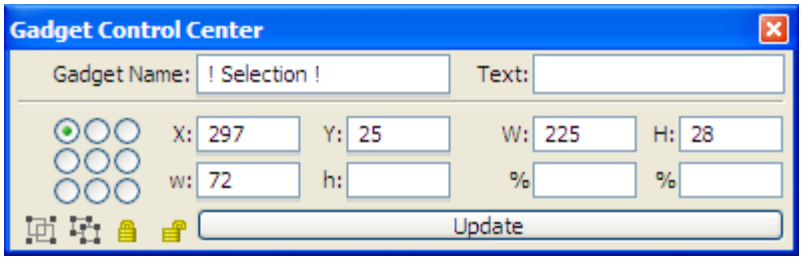


Illustration 187: Gadget Control Center - distance control.

relative coordinates) are changing now to w: and h: (width and height between gadgets). So if you can't use the automatic distribution function, because you want a fix amount of pixels between the gadgets, this is extremely useful. On top of this you can decide how to propagate the distance! Click on one gadget of your selection to determine the 'Primary' gadget (blue frame). This gadget will stay as the reference and all other will move. For a vertical adjustment: If the top gadget is selected as primary then all other gadgets in their order will move down with the chosen distance (h: height) between them. If a middle gadget is selected as primary then the upper gadgets will move up and the lower gadgets move down. If the bottom gadget is selected as primary all other will move above that one in the chosen distance. The same applies of course to the horizontal direction. You could even change both at the same time, although i would not recommend it as it could be difficult to guess the result.

The counterpart to the distance control is the automatic calculation and display of the distance of two selected gadgets. That means, when you have exactly selected two gadgets, Logic Gui calculates the distance between them and shows them in the w: xxx and h: yyy fields of the Gadget Control Center. You can easily check out several combinations with 'Shift' click on gadgets to add or subtract them from the multi selection. Be aware that no negative values are shown, so only the real distance (width/height) between the end of the first gadget to the beginning of the next gadget is shown, either in x or y direction.

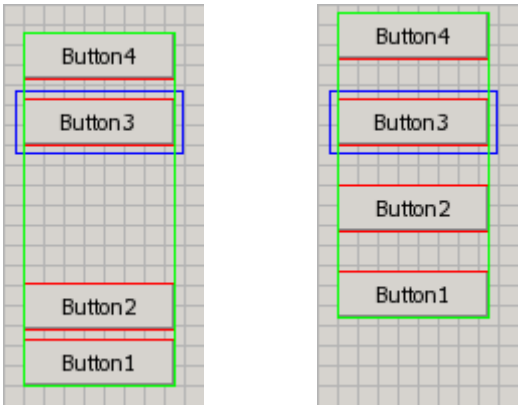


Illustration 189: Distance Control from the middle.

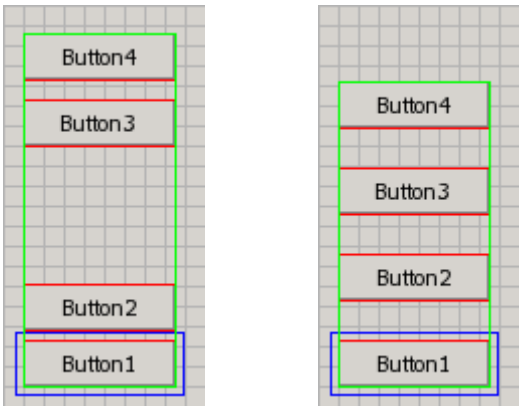


Illustration 188: Distance Control from the bottom.

8.1.5 Magnifier

When you position your gadgets more visually than per coordinates a Magnifier window can assist you to find the right pixel/point.

The magnifier shows always the area around the mouse pointer. A trackbar lets you choose the magnifier factor. A higher factor zooms in, a lower value zooms out.

Position and factor of the Magnifier window are stored in the ini file.

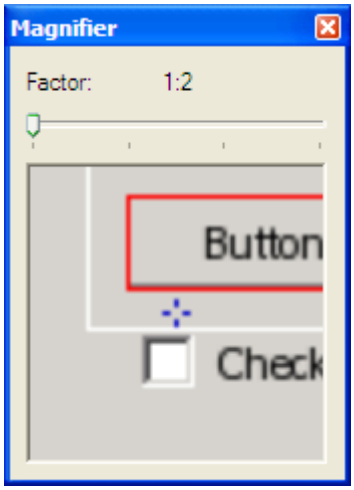


Illustration 190: Magnifier Window - Factor 1:2

8.1.6 Process Output

The Process Output Window is the connection between Logic Gui and the testform you compile via Run. It catches all messages from the BlitzMax compiler and thus all the debug information from our form.

The Process Output Window can be resized and positioned to your needs, all settings are stored in the ini file and will be remembered. The content of the output window stays available till the next start of the compiler. When a source code test is running, the Window is updated a few times a second and you can still work on your form! The Process Output window shows also on the top which bmk.exe is used. Useful if you use different BlitzMax versions simultaneously.

8.1.6.1 Show Error

An additional button 'Show Error' is available to jump directly to the position where the error occurred.

The WorkSpace tabber switches automatically to the Full Code tab and highlights the line where the error is detected. Thus you have immediately the overview where the problem came from. This often saves the time to call an external editor to check the code. Nevertheless, this automatism works only if the compiler could identify the exact place and reports it back. An Unhandled Execption, where your program breaks suddenly, can't be shown.

Check out extra settings in the View Menu for this Process Output Window.

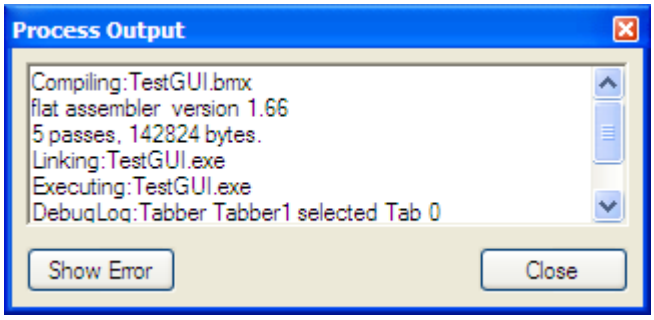


Illustration 191: Process Output Window - compile the testform.

8.1.7 Layer

Putting your gadgets into different layer, let you easily create otherwise complicated forms. Layers can be used to structure the gadgets or to put gadgets in the same place, which should then appear at different times.

A "Base" layer is already present for all gadgets. In the Layer Window you are able to add and select a layer. Every layer has a name and a transparency level for the gadgets stored in that layer. The transparency level of the selected layer can be adjusted with a slider on the right. Thus you are able to make the top layer shine through and see the gadgets from the layer underneath.

If you select a gadget in the workspace the Layer Window will immediately show to which layer this gadgets belongs to and the current level of transparency of that layer.

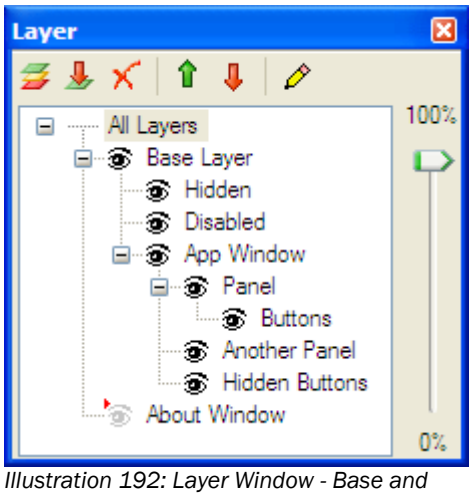


Illustration 192: Layer Window - Base and sublayer.

8.1.7.1 Add Layer

Click on the "Add Layer" icon in the toolbar to get an extra entry in the layer list. Where this entry is added depends on your current selection, as i support also layer in layer! A new line will be created in the list and is waiting for your input. (Here underneath the selected Another Panel entry!) So give it a meaningful name. When you hit enter or select anything else the input will be closed.

8.1.7.2 Edit Layer Name

If you like to change the name at any time, select the layer and click on the "Edit Layer Name" icon.

8.1.7.3 Move to selected Layer

After creation of a new layer you can move gadgets into. To do so, select some gadgets, select the layer and click on the "Move to selected Layer" Icon.

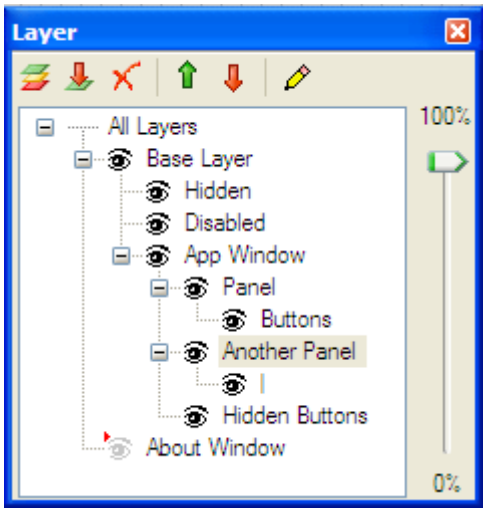


Illustration 193: Layer Window - adding a new layer.

8.1.7.4 Move Up / Move Down

To decide which Layer should be drawn before another one you can select a certain Layer and click on the "Move Up" or "Move Down" Icon and shuffle them about (only allowed in the same hierarchy).

8.1.7.5 Delete Layer

If you don't need a layer anymore, select it and click on the "Delete Layer" Icon. If there are still items or sublayer items attached to this layer they will be put back into the Base Layer regardless if the Base Layer or the Layer to delete is visible or not, nothing is lost.

8.1.7.6 Toggle Visibility

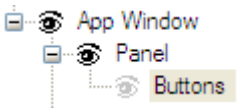


Illustration 194: Layer - On / Off.

If you double click a layer (or select the layer and hit return) you can toggle between a visible or invisible state of the gadgets inside – the eye icon in front of the layer shows the actual state. Look at the App Window and Panel node, the eye icon is black – the layer is visible. Different from that, the Buttons layer, which has a grey eye icon in front – the layer is invisible (but the source will be created!).

The layer window itself is re sizable! Logic Gui remembers the position, size and hidden state of the Layer window during exit and recreates it during next startup. All Layers and settings are saved with the form and can be reloaded.

8.1.7.7 Select Gadgets of Layer

To select all gadgets of a certain layer right click on the layer and choose "Select Gadgets of Layer", all others will be deselected, but only visible gadgets of that layer will be affected (for gadgets on an invisible tab or scrolled away on a ScrollPanel i prohibit any action!). When you right click a certain layer there are some more options: "Hide this Layer" does just what it says. "Hide all other Layer" will hide all other layer and make the selected layer visible. "Show this Layer" ... "Show all Layer" will make all layer visible. "Create Output" is a toggle switch (Menu checked or not), enables you to turn source output on or off for every layer. This is independent from the status of visibility. A layer can be hidden but produces source output or is visible and doesn't create any output! A small red sign in front of the layer icon shows you if a layer does not produce output.

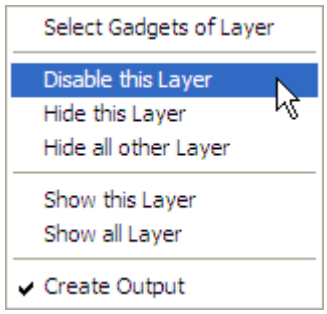


Illustration 195: Layer Window - Popupmenu.

Layers can also be disabled. When disabled, the layer is shown but is not available for any other gadget action (selected gadgets will be deselected in this layer)! A visual feedback is that the disabled layer will be set automatically to 50% transparency (can be changed afterwards). With this feature it is possible to put for example a window or other container in the background and you can't by mistake select it while working with the gadgets on top. Every finished gadget can then be moved to that layer later on if you like. When clicking on a gadget of a disabled layer, nothing will happen - like if you clicked on the WorkSpace background. A hidden layer cannot be disabled and vice versa. A red eye icon indicates a disabled layer. When you double click on a disabled layer, this layer will be enabled again.

***Note:** If you select "New" from the File Menu all layers are deleted and an empty Base Layer is created. This new Base Layer is automatically selected to catch new gadgets.*

Any new added gadget will check which layer is active and put itself into that. If no layer is selected any added gadget will be put into the Base Layer. If the selected layer is invisible the gadget will also be hidden, be careful! Paste will also take the selected layer into account! The selected layer can also be invisible, your items will just disappear.

8.1.7.8 All Layers

All Layers are put together underneath a "All Layers" TreeView Node. Also this logical layer has some functions. Double click it to toggle all layers underneath on or off. Single click it and change the transparency level of all layers in one go. Thus you are able to hide all layer, add immediately a new visible one, add new gadgets to this new layer, all very fast and easy. Or you have set different layer to different transparency and you can reset them all together with one click on the slider.

If you select a container gadget (Window, Panel ...) now only gadgets which belong to the same layer or a sublayer will also be selected. You can staple panels on top of each other all in different layer and they won't interfere.

Open/Insert will also load the layer of the saved template and add them to the layer tree except the Base Layer. All gadgets from the template inside the Base Layer are merged to the current Base Layer of the active form. If you don't want to mix inserted gadgets with your current gadgets, save the template with no gadgets in the Base Layer! As any new insert is automatically selected you can just add another layer and click on "Move to selected Layer" and all inserted gadgets will be part of that new layer and don't interfere with the old ones.

***Note:** When you move gadgets into a container, the connection to this container is only done when both are in the same layer or the gadget is in a sublayer!*

8.1.8 Language

Logic Gui lets you create a form with several languages for your gadgets. Switch those languages during runtime or compile different versions with different languages from one form.

The Multi-Language Support Window consist of a toolbar with some functions and a ListBox for the used languages.

Illustration 196: Language Window - select a language.

8.1.8.1 Add Language

The top left icon lets you add a new language, when you click on it another ListBox appears at your cursor position to choose an additional language. For the moment i put all 188 languages of the iso standard with a two character id in a language file (Lang.xml) where i then read from, but you can change this if you want and add your favorite language. To navigate inside the ListBox use the standard keys: Home - first entry, End - last entry, G - jumps to the first language starts with a G, Page Up..., Page Down..., Cursor Up..., Cursor Down..., Cursor Wheel - as well for up and down. The list shows you the English name of the language and the tip the id. Double click a language to add it to the list and automatically activate it (already used languages don't appear!).

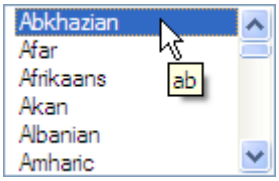


Illustration 197: Language Window - add a language.

***Note:** The form is updated and the gadgets who need a new text will show a "????".*

*To select another language just single click on it in the main language window, the form will be updated immediately. To change a language double click it (the ListBox with all languages pops up) and choose another one or **right click to cancel**.*

8.1.8.2 Create XML Output

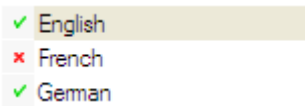


Illustration 198: Language Window - icon usage.

In front of every language is an icon which represents if this language will be written to the xml file during source creation. As default every added language got a green checkmark, thus you will get xml output, to change that right click the language and choose "Create XML Output" and uncheck it. The icon in front of the language will get a small red cross. This is may useful if you added a language but did not finish the translation yet.

8.1.8.3 Delete Language

If you decide that a certain language is no longer needed, select it and click on the delete icon. If you did this by mistake, don't panic - your translations are not lost, just add it again and all will be fine. I will hold any language in memory until you quit Logic Gui. Languages listed in the Language Window will be saved in the form under the Application node. If you insert a (template) form all additional languages will appear in the list and can be used. The current default language must not be deleted from the Language Window (see below) and will result in an error message if you try it.

8.1.8.4 XML File creation

In the toolbar you will also find an icon for xml file creation, this is a shortcut to the Properties/Application/XML/Use_XML button. Doesn't matter which one you click, they do both the same. When enabled, Logic Gui saves all (green) marked languages to the specified xml file.

8.1.8.5 Import Language

Import a language file. How does it work: When you create a new form and add some languages but don't know all the translations of your labels it is may wise to ask somebody who speak the language in question as mother tongue. So now you can send the person your executable and the language xml file. The person can fill all gaps in the language file and send it back to you. Instead of copy and paste or re-enter all data you can easily import such a file.

Illustration 199: Language Window - import a language.

During import you can decide if you want to overwrite all entries from this certain language (default) or only those which are not yet set (????-Fields). Click on the 'Import Language' icon. A file requester will open and ask you for the correct language xml file. When chosen, a new window opens which shows you all available languages in that file. Select one language and click on import (or double click). Logic Gui will read in all relevant data (Text and Tip of all Gadgets, Items, Menus). Any text which could not be assigned to an existing gadget will be ignored. You can then select another language to import or cancel to go back. If the language didn't exist before import it will be added automatically to the language list. The imported language will be selected and the form updated to show immediately the result.

Although the handling of a multi language form is straight forward, you need to understand how all the pieces should go together. It is not that complicated, but complex. An example can be found in the user area and a video can be downloaded here:

HTTP://JSP.LOGICZONE.DE/VIDEOS/MULTILANGUAGE.HTM

8.1.8.6 Export As MaxGui Language

It is possible to export a single language from the Language Window. When exporting a single language you can choose the filename. You can also export all used languages of your form as MaxGui language ini files from the File/Export menu.

8.1.9 Layout Control

A new tool window is available. This 'Layout Control' window will help you to easily adjust the gadget layout rule of a single gadget or a bunch of gadgets for all most common settings. You can see a graphical representation of the layout rule. There is an outer border which stays for your parent and there is an inner area which stays for your

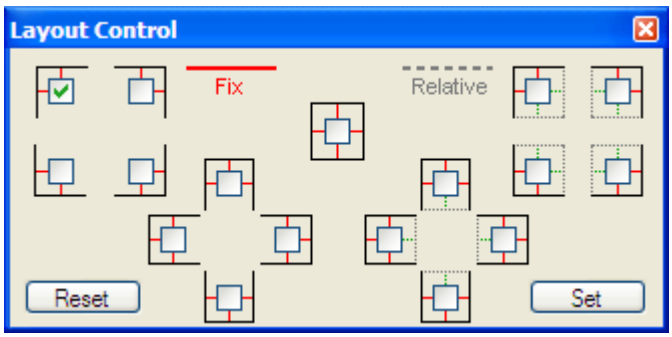


Illustration 200: Layout Control Window - set a layout.

gadget. In fact the inner area is a checkbox button which can be selected when you like to choose that rule.

The outer border shows you a black line and a red connection to the inner area, when this gadget side is fixed aligned to it's parent side. And you will have a dotted line if that edge is adjusted relative to it's parent side. If no border is given at a certain side, that side will stay centered. Also if you select some gadgets and choose 'Reset' in the Layout control window all sides will reset to the default -> centered. If you click on a certain rule all others will be deselected. If you click on set, all currently selected gadgets on the workspace will get the new layout setting.

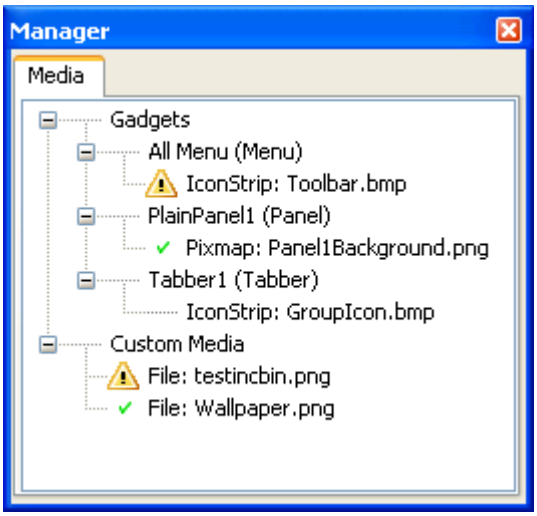
Most of the time you first design your form and afterwards set the layout rule of the gadgets, but that mean you have to reopen every gadget property and select individual layout settings for each gadget side. Now you are able to do this by just two clicks for a lot of gadgets simultaneously. The new window can be moved together with all other tool windows using the CTRL- drag Workspace method. Position is saved on exit as expected. The 'Reset' and 'Set' can be undone.

***Note:** When using a frame to select one or more gadgets the status of the Layout Control window is updated on the fly, but shows it only for a single one (when the layout rule is one of the common settings, otherwise all boxes are cleared).*

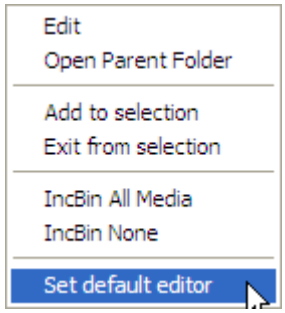
8.1.10 Manager

The Manager Window is there to manage your form and gadgets.

8.1.10.1 Media Manager



The window contains a tabber and the first tab let you choose 'Media'. This Media-Manager tab shows a TreeView of sorted gadgets which uses external media files (pixmaps for panels, textfiles for textareas, toolbars for windows, iconstrips for list based gadgets and so on...). Every gadget listed, shows underneath the type and filename of the external media. The 'trick' is now to double click on a media file and Logic Gui will automatically IncBin this file and change the source code accordingly! A green check mark in front of the media file will show you which one will be IncBin-ed. A warning sign is displayed when a media is not available anymore and thus can't be IncBin-ed. If you double click on a listed gadget, the Properties Editor will be opened with the chosen gadget. If you right click on a gadget or the media file belonging to that gadget a popup menu opens. In the popup menu you have several choices – Edit, Open Parent Folder, Add to selection, Exit from selection, IncBin All Media and IncBin None. Edit will open again the Properties Editor when right clicked on a gadget, but this time it will add the gadget to the current selection. When right clicked on a media file, edit will open that file. Open Parent Folder of an external media opens an explorer.



'IncBin All Media' and 'IncBin None' will exactly do what it says. Thus you are able to IncBin all external media with a simple click! Logic Gui will collect all paths from all media files and create a header in front of the source code, after that every access is directed to the IncBin media. The treeview gives you a good overview over your external files and their availability and you can IncBin any single file, only exception is a SmartButton and menu iconstrips. A SmartButton has a single IncBin flag for all media contained. For the menu you can IncBin only all iconstrips or none, but you can edit every single iconstrip.

'Set default editor', when selected it will ask for exactly that type of media, which program should be used for edit, thus you can easily change your default at any time.

***Note:** When using several times the same media file in different gadgets and ask to incbin all of them, every*

media file is checked and incbined only once when needed.

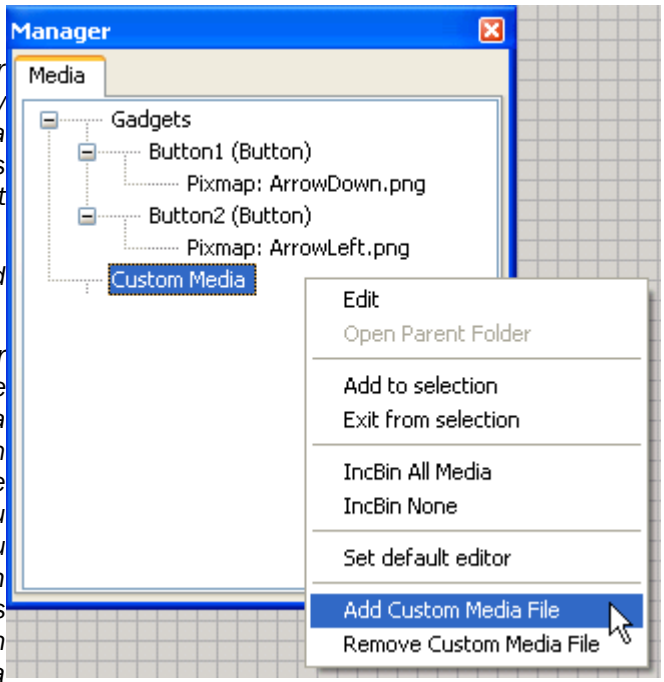
The primary gadget of the form is selected in the media treeview, thus you can see immediately, which media belongs to a certain gadget when you selected it.

The tool window can be moved with all other tool windows and the workspace by pressing CTRL and moving the WorkSpace. You can hide or show all tool windows using CTRL-T. The 'Manager' window can be resized to match your needs. The last size and position will be stored on exit.

***Note:** When you choose to edit a media file, Logic Gui will check for the filename extension and search in the ini file if a program is defined for this kind of media file. For the first time there is nothing defined and you will be asked to do so. When a program is found or defined the media file will be opened for direct edit with this program.*

In the Media Manager you will find also a main group called 'Custom Media'.

It will enable you to add your own media files to your application and not only the media used by the form. Underneath this main node in the media treeview you can add on right click any file you need for your program. The main point is of course that the chosen file can be IncBin'd simply by a double click and Logic Gui will do the management!



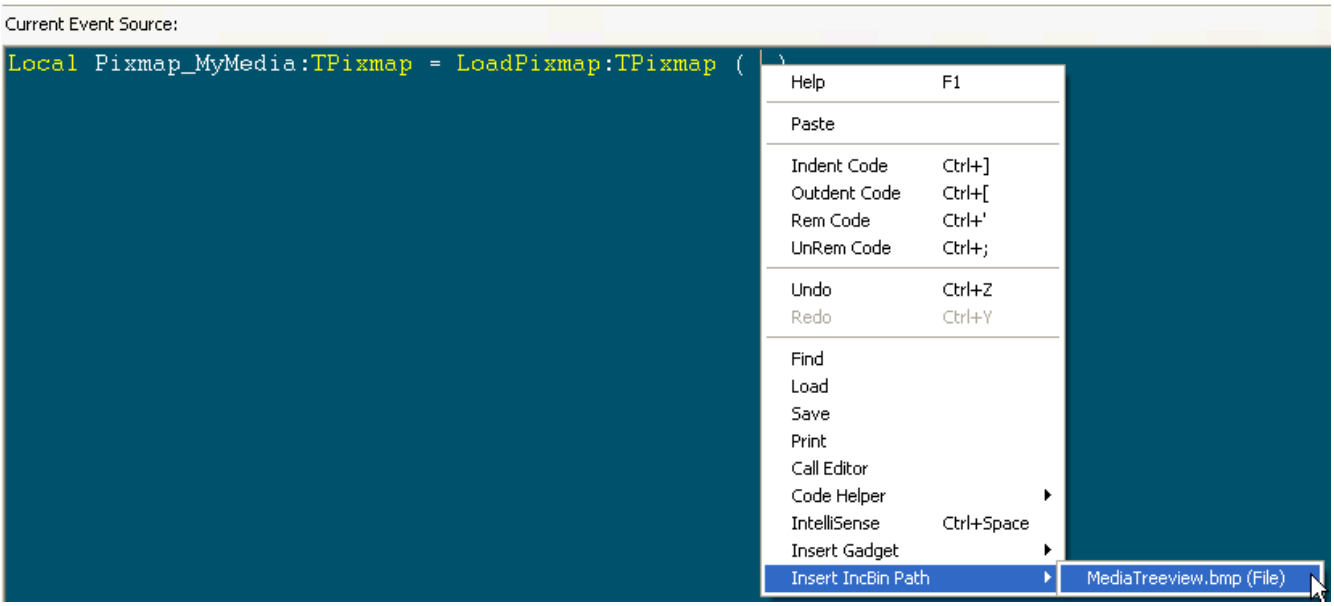
All other stuff is also working. Set an editor for your media and open it directly from Logic Gui, or quickly open the media's parent folder. Of course to open a certain media like a ReadMe for your program makes also sense if it is not IncBin'd, just to have a direct access.

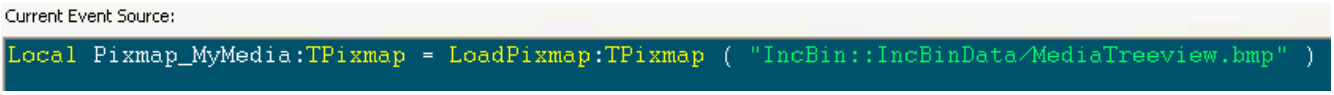
Media you added can also be removed, if you don't need it any longer.

All absolute paths selected in the RequestFile explorer will automatically converted to a relative path to be more flexible. That means, that if you organize all your media in subfolders underneath the main form folder you can copy the whole stuff to another location and you will be fine, but if you use media outside your form folder you have to take care and may re-register those media. You can also export your form using the "Export Form" from the File menu and all registered media are exported as well, regardless of the IncBin status! This works with absolute and relative paths, because it collects all data in a single folder (structure is lost).

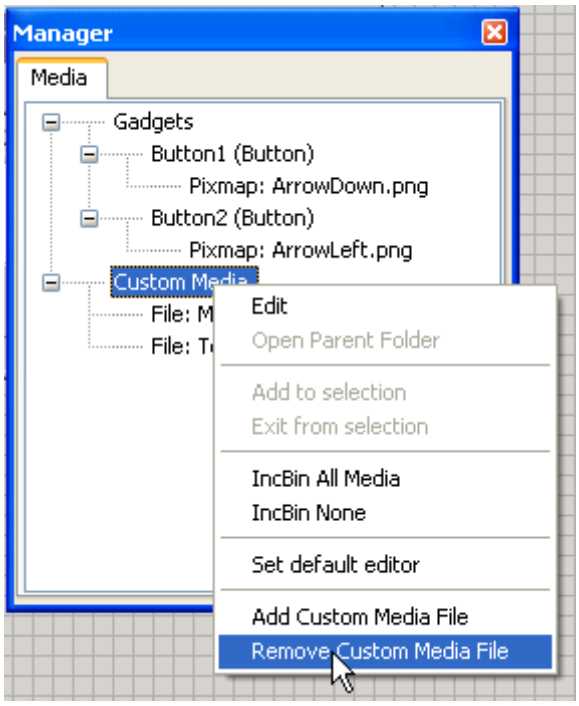
Entries pointing to the same media will only be IncBin'd once.

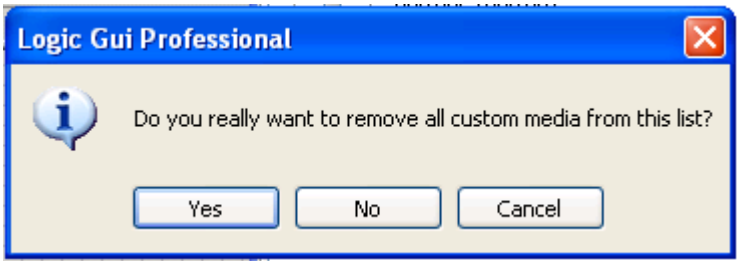
And those who use the build in Event Editor don't have to remember the path of the media, because the right click popup menu lets you choose your media and the corresponding IncBin Path is entered for you automatically. This saves time and is less error prone, because the path needs to be exactly with case and slashes, even on windows.





The chosen media path will be inserted at the current cursor position.





It is also possible to remove all media at once if needed, if you select the main parent treeview node and choose 'Remove Custom Media'. You will get a security requester and if you agree the list is cleared. Of course no physical media is deleted.

***Note:** If you try to IncBin a custom media file which was deleted in the meantime, you will get a warning inside the source code indicating the problem. Same applies to the Event Editor, which inserts a warning if the file in question was removed.*

8.1.11 Anchor

When a child is anchored to an edge of its container, the distance between the child and the specified edge remains constant when the container resizes. For example, if a child is anchored to the right edge of its container, the distance between the right edge of the child and the right edge of the container remains constant when the container resizes. A child can be anchored to any combination of child edges. If the control is anchored to opposite edges of its container (for example, to the top and bottom), it resizes when the container resizes.

Illustration 201: Anchor Window

To control the anchor, there is a new tool window. When open you will only see some icons. The meaning is from left to right: Anchor all sides, anchor no side, anchor left side, anchor top, anchor bottom and anchor right side. The last icon indicates a link to the 'Layout' tab or SetGadgetLayout() command. If pressed (icon can be toggled on/off) every change will be reflected to the gadget's layout. Every anchored edge will be set to 'Align' and every other edge to 'Centered'. That should save you time in case you want the same behavior for the layout or you can decide to have the form anchor completely separate from the layout. The state of the 'Link to Layout' is loaded from the ini file on start and new, and saved and loaded with the form as it makes sense to turn it on for resizable windows and otherwise off.

How do you work with this:

The anchor feature works best when you deselected 'Select container, selects children' from the view menu. That means, if you select a window the children are not automatically selected as well, but to have them, for example, move with the window you can anchor the children. Select the child and press the icons for anchor to left and anchor to top in the Anchor window. The child anchors always to the parent it is currently in when the anchor is set! When you start moving the window, the child will now follow without being selected. If you resize the window the child won't be affected in it's size until you anchor opposite sides. That makes it easier to work on the parent gadget (no need to press CTRL for parent selection for instance) and acts may more like the later form.

You can move children outside the parent, they will still follow or resize, just as they were inside. To anchor to a different parent, you first have to release the connection to the old, by pressing the icon for 'Anchor no side'. Afterwards you can anchor again to whichever parent the child is in.

The anchor feature jumps in nicely also when using the distance control, or automatic distribution. Distribute only the containers and the anchored children will follow without extra grouping or manual actions. Whenever you select a gadget the anchor window shows the current state.

Illustration 202: Single gadget selected with anchor set to left and top.

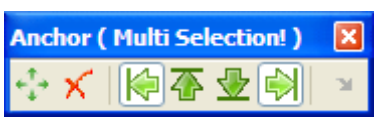


Illustration 204: Multiple gadgets selected and they have all left and right anchor set and top and bottom not.

Illustration 203: Multiple gadgets selected and their anchor settings are different.

An anchored gadget can be moved and sized as you wish, the new margins to the parent are stored on the fly. If the parent is moved or sized then those new margins are taken as distance. If you lock a gadget which is anchored, it will still move or size with the parent container, but omit any unintentional interaction from the user.

When you select several gadgets, Logic Gui checks on the fly if they use the same anchor. If they do, the Anchor Window shows the current setting of all selected gadgets and a remark '(Multi Selection!)' in the window title. If the anchor setting of the selected gadgets differ from each other, the Anchor Window shows nothing. At any time you can set a certain anchor to the selection, any previous anchor will then be deleted.

***Limitation:** Don't anchor gadgets on ScrollPanels as they have their own internal anchor.*

When using the Anchor window to anchor your gadgets to parents, you may could be confused why the gadget could not be anchored in a certain situation. This could happen when the parent gadget is in a wrong layer. You will get a notification to remind you, because the layer window is may not open and thus not obvious.

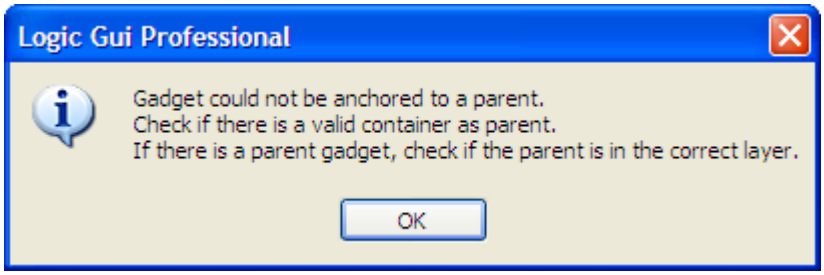

Logic Gui Professional
Gadget could not be anchored to a parent.
Check if there is a valid container as parent.
If there is a parent gadget, check if the parent is in the correct layer.
OK

Illustration 205: Anchor - Don't work without valid parent.

Under the Gadget tab in Properties/Application you can find a new checkbox for the anchor. While adding new gadgets to the form Logic Gui can anchor them for you automatically on the parent you clicked on, with a top and left anchor. That should save you quite some time and let your child gadgets immediately follow the parent. Any other behavior can then be set via the anchor window. It is recommended to switch this on, when working with anchors instead of the 'container selects children' method. The state is loaded from the ini file on start and new, and saved and loaded with the form.

Illustration 206: Anchor New Gadgets - automatically top and left to the parent

8.1.12 Menu Control

The Menu Control Center should help you in putting a suitable menu together. A menu can be saved as single file for later re-use and be attached to any window in you current form if needed. Logic Gui will automatically insert a proper Tag ID and manage it, if several windows will use the same menu.

The window is separated in three parts: Menu Structure, Select Menu, Menu Entry.

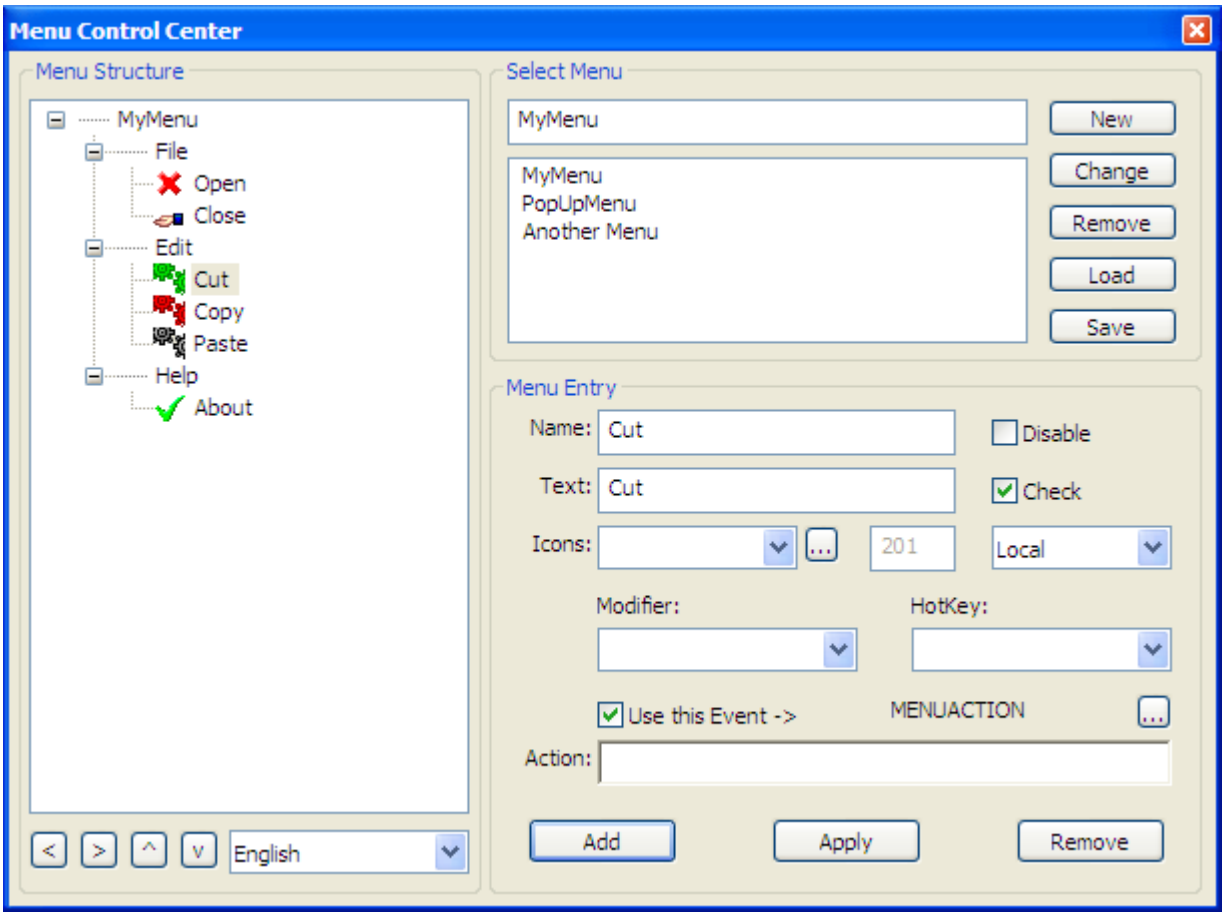


Illustration 207: Menu Control Center Window - menu structure.

When you finished creating or editing your menu, just close the window via the top right close button.

8.1.12.1 Menu Structure

The treeview on the left side represents the menu with all your existing submenus.

The four < > v ^ arrows (oh what lazy no graphics) will move your selected menu with all submenus around, just to where you want, very easy, try it.

The ComboBox let's you choose the language the menu text is meant for, thus you can make your menus also multi-language if needed.

Icons will identify different menu settings:

Red stands for a disabled entry.

Green for checked entry.

Gears for an enabled event.

A hand stays for a hotkey.

All other represent a combination of it.

8.1.12.2 Select Menu

The top entry with the menu name stays for the window itself. Every entry underneath will later on in the window a menu to the right. Sounds too complicated? Just try it, it's easy.

Start on the top right and type a name for your first menu. Select "New" to create an active entry.

When ready save (optional- it's always saved with the form) and close the window and use your menu in one of the source tabs as window or popup menu.

You could also load a menu from a single saved file or all nested menus from an existing form!

Alternatively you can drop the .MLG file onto the Workspace. The Menu Control Center will open and load your chosen Menu File.

8.1.12.3 Menu Entry

You are now able to add new entries to this menu. Give every entry a name (again, this will be used for the variables and must be unique! But only inside this menu though). Type a text which should show up later on in the menu.

Check "Disable" to have the menu entry grayed out and block interaction.

Check "Check" and this menu entry will show up with an checkmark.

Choose a modifier like shift or control to differentiate between hotkeys (hotkey needed!).

Choose a hotkey which will call the same event when pressed as the associated menu entry.

Select the event to generate an event queue entry and a function.

Choose an icon to every menu gadget. You can load an iconstrip and choose via a combobox which icon you want to use. This can be done independently for every menu.

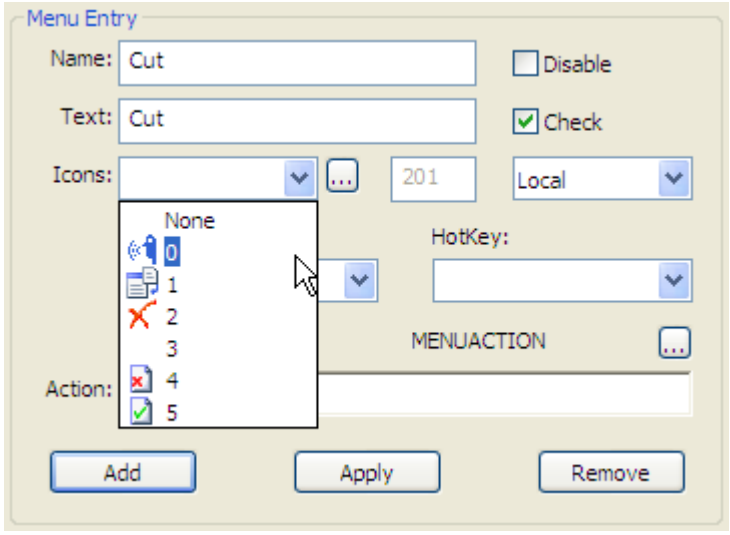


Illustration 208: Menu Control Center - Menu Entry.

Thus you can use more than one iconstrip for your menus. If you group several icons together in an iconstrip, the last loaded iconstrip can be used directly for the next menu item, avoiding extra clicks. All used iconstrips are collected during source creation and put together as a header. The created menu afterwards accesses then the different iconstrips and extracts the selected icons. Please keep in mind that icons should not be bigger than 12x12 pixel and they don't show up in the root level (Logic Gui will not even produce the output for icons of root level menu items).

Choose between Local, Global and Field as variable type for your menu gadget as you need. Again global and field variables are placed in the header.

Add	*adds the current entry underneath the selected entry of the treeview.*
Apply	*changes settings of an existing entry.*
Remove	*deletes the entry.*

8.2 Properties Editor

The Properties Editor is mainly there to customize the usage of the gadgets. That means not only the obvious handling of the gadgets itself, but also the application behavior and source code creation. The editor

can be opened by double clicking a gadget or right click on the WorkSpace and then chosen from the popup menu.

The Properties Editor can be opened more than one time, use as many as you need, but this has one drawback, Logic Gui needs to know which one has the focus and tracks this with the activated event. When an editor window already exist, it will be automatically updated to reflect the latest status of the form, when the event occurs. Unfortunately MaxGui is not consistent that a window activate event always occurs before any event from a gadget inside this window. That means when you switch between different Properties Editor Windows you should activate the window before clicking on any gadget inside to be sure that no event is lost.

The window is divided in three parts and is resizable. On the left side you will find the Gadget Chooser where you select the gadget you want to customize or select the application to change program wide properties. The Info area indicates what you are going to change and the tabber is actually the place where the parameters are set.

***Note:** While switching from one tab to another or from one gadget to another all settings will be saved automatically. If you want to revert the changes you made to the gadget(s) use the undo.*

8.2.1 Gadget Chooser

The Gadget Chooser shows a treeview where you are able to select what properties you want to change. When you select a gadget, the tabber shows the available tabs/properties of that gadget type. If you switch from one gadget to another in the Gadget Chooser and the same tab/property exist for the newly chosen gadget, it will be selected automatically. Thus you can check and change quite fast a certain range of gadgets.

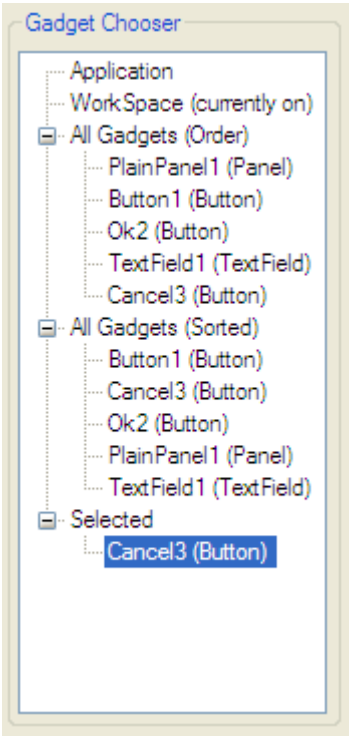


Illustration 209: Properties Editor - All Gadget.

8.2.1.1 Application

The application wide properties like naming conventions, variable preset, application files and events, or also the xml setup.

8.2.1.2 WorkSpace

The WorkSpace is not only the place where you put your gadget on, but also a window you can use to test quickly some layouts. Right click the WorkSpace treeview entry to choose between on and off or use the checkbox under Application/Gadgets.

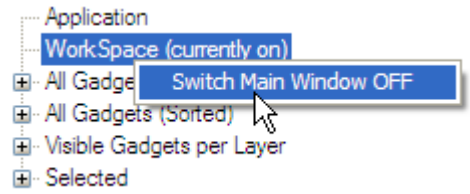


Illustration 210: Properties Editor - toggle WorkSpace window.

When chosen, the WorkSpace window can be customized to a certain extend, but has not the same functionality like a Standard Window (for instance no anchor points).

8.2.1.3 All Gadgets (Order)

Gadgets listed in the order they are inside all the layers (and thats the order they are drawn), including the base layer, which is the default layer if you don't use any other. Select the gadget you want to modify or right click one to select it in the form or to delete it (useful when difficult to select in the form). The gadget type is shown in parentheses to easier identify it amongst others.

8.2.1.4 All Gadgets (Sorted)

Here you find again all the gadgets listed, but this time sorted by name. Of course you can find a certain gadget now easier, but you can't say which one is in front or back of another gadget like when looking at the order.

Note: *Right click on the "All Gadgets (Sorted)" node to choose between ascending or descending sort.*

8.2.1.5 Visible Gadgets per Layer

If you entered an additional layer parallel to the base layer in the Layer Window, the Properties Editor lists all gadgets sorted by layer underneath this node. Also layer in other layers are visible as subnodes in the treeview. The order of the layers is maintained as defined in the Layer Window.

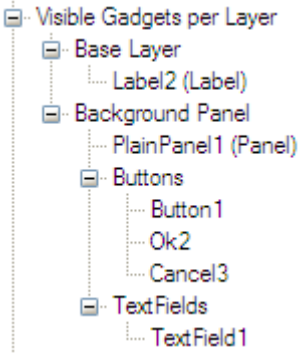


Illustration 211: Properties Editor - Gadget per Layer.

8.2.1.6 Grouped by Parents

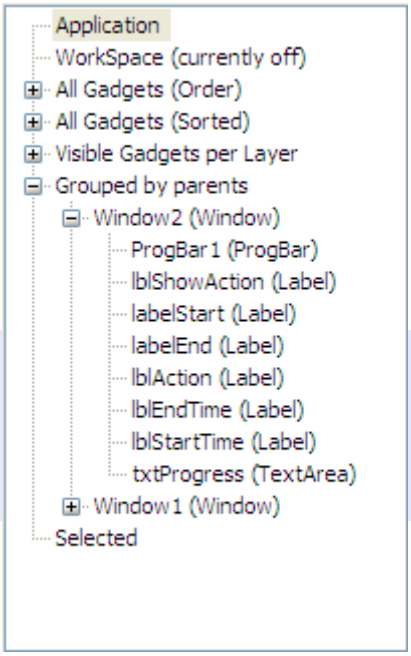


Illustration 212: Properties Editor - Group by Parents.

When opened it will show all child to parent connections which should help a lot in bigger forms. When there is only one container gadget on the WorkSpace the corresponding node is already opened for you and also all gadget nodes underneath. When there are more container on the WorkSpace all nodes are closed and you can choose directly which one to open. If you open one, again all child gadget nodes are opened automatically showing you the structure of that parent.

Note: While you can choose at different locations the 'grouped by parent' view there is one thing good to know. When using a tabber with several tabs, they are shown as children of the tabber, but you know this does not exist in MaxGui, so they are only there to help you. You can't do anything with them! They visualize the structure of your form only.

8.2.1.7 Selected

All gadgets selected in the form will be shown here again for fast edit. If you double click a certain gadget the Properties Editor opens and the "Selected" node in the treeview is expanded, showing all gadgets which are selected inside the form. The gadget you clicked on is highlighted in the treeview and the properties loaded into the tabber, ready for edit.

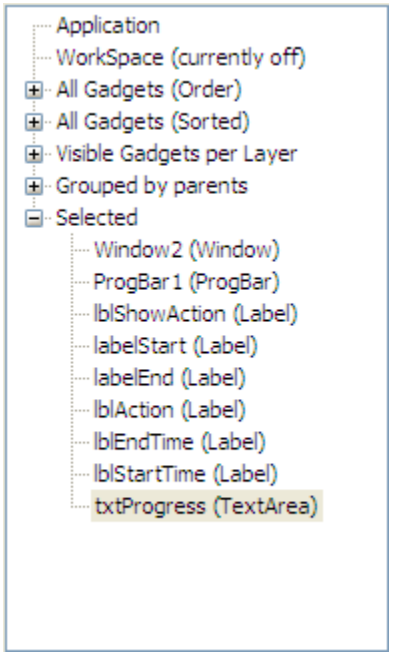


Illustration 213: Properties Editor - Selected.

8.2.2 Info

In the info area you can see the name and the text of the gadget and you can choose via the combobox on top right corner which language to use.

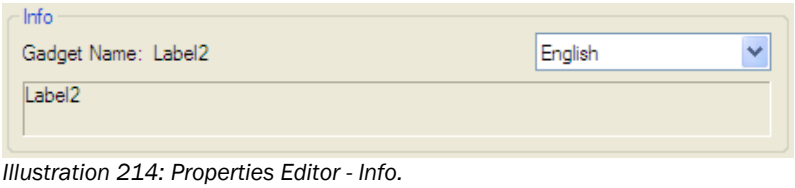


Illustration 214: Properties Editor - Info.

8.2.3 Properties Tabber

The tabber is the actual place where you modify the gadget properties if you like or need. All changes you do are automatically saved when leaving a tab! Use the undo function, after leaving the editor, if something went wrong.

The tabber is customized depending of the gadget type you have selected. More or less tabs are shown where you can do your modifications. There are a few tabs which are considered as main tabs, as they normally look the same for all gadgets. These are: General, Layout, Color and Fonts. Those tabs are available for almost every gadget. Other tabs more special and only visible if needed or slightly different for each gadget type. I will explain the main and some common tabs here and all extra tabs can be looked up at the corresponding gadget.

8.2.3.1 General Tab

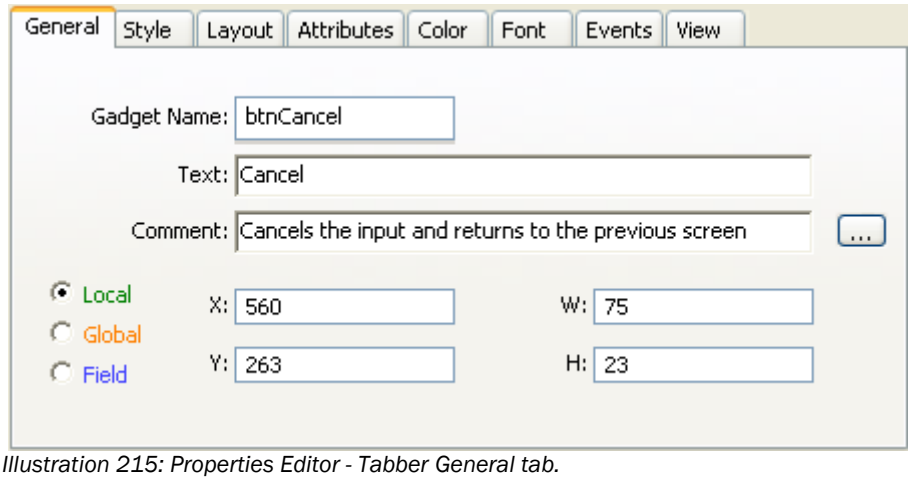


Illustration 215: Properties Editor - Tabber General tab.

The General tab shows more and less the same as you could see in the Gadget Control Center, but a few things are different. Here you are able to set the gadget type. Local is the default in Logic Gui, but can be set to any other type under Application/Gadgets. Whatever is set will be taken, when you add a gaget to the form. Use the General tab to setup the gadget in question every time it should be different from the default. The same color of the variable type can also be found in the Gadget Control Center or in the default application settings for easier recognition.

Another difference is the comment field. It can be useful just for yourself to remember something important or also for others as hint for a multi language form, where this comment is exported as well. Is a gadget defined as "Global" or "Field", the comment is also written into the source code behind the variable declaration (single line only). If for any reason you need a longer text you can call the Event Editor when clicking on the three dots button.

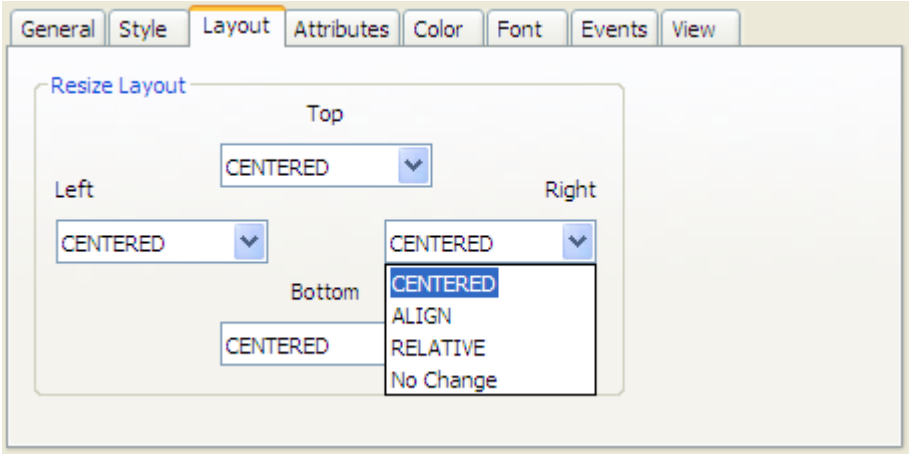


Illustration 216: Properties Editor - Tabber Layout tab.

The X,Y,W,H textfileds can be taken to set position and size like in the Gadget Control Center. You can also use simple formulas to calculate the correct value on the fly. The values will be reflected in the gadget creation code.Layout Tab

The Layout tab lets you set the rule how the gadget should behave when the parent is resized. The default is CENTERED. Setting any value other than the default value results in a SetGadgetLayout() command inside the source code. Set the appropriate value you need to get the right behavior you want.

This tab is useful when you need to change the layout of a single gadget, but for a multi selection it's better to use the Layout Window.

8.2.3.2 Attributes Tab

The Attributes tab is mainly there to set the hide or disable attribute, because they are most often used. Both attributes result in the corresponding MaxGui command HideGadget() and DisableGadget(), but nothing changes to the form.

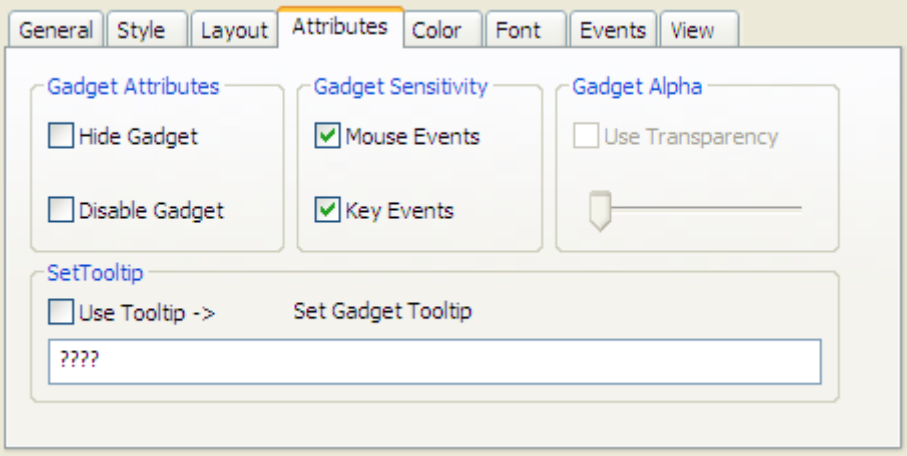


Illustration 217: Properties Editor - Attributes tab.

Gadget Sensitivity

The SetGadgetSensitivity makes your gadget sensitive for mouse and key actions (generating events).

You can easily switch on the Mouse or Key Events via checkboxes separately. The SetGadgetSensitivity() command is still 'experimental' and not really cross platform. So use the command with care and test if the gadget works with it.

***Note:** No event or function code will be crated, when the SetGadgetSensitivity() is turned on!*

Gadget Alpha

For window and panel gadgets you can adjust the alpha transparency. A slider and checkbox controls this.

Set Tooltip

A tooltip can be entered for all non list based gadgets. The tooltip information in Logic Gui is multi language able!

8.2.3.3 Color Tab

The Color Tab adds foreground and/or background color to the gadget. This is not supported yet on all of the gadgets, check out the MaxGui docs. A big difference is between the old MaxGui and the new MaxGuiEx. Setting any value other than the default value results in a SetGadgetColor() and SetGadgetTextColor() command inside the source code. The reset button, sets all values to the default.

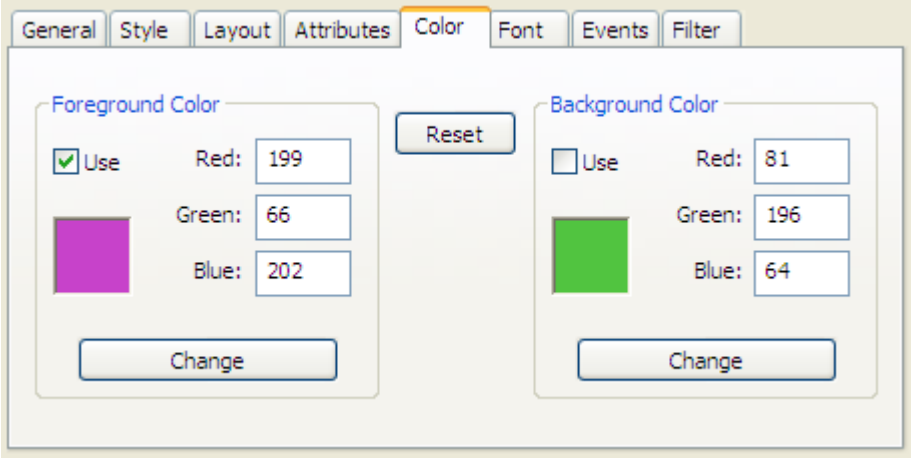


Illustration 218: Properties Editor - Color tab.

You can change directly the textfields if you know the values or open up the color chooser.

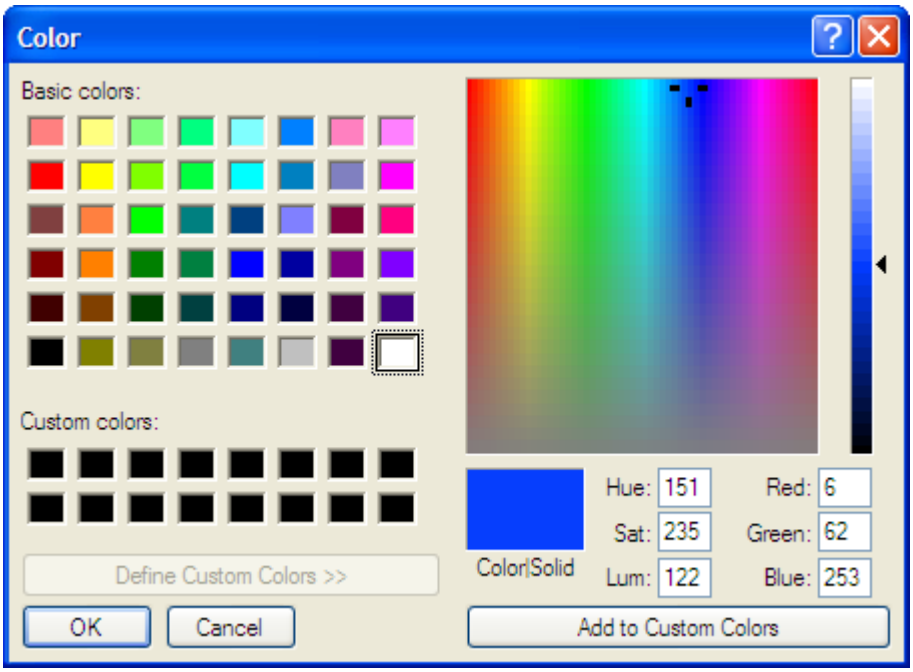


Illustration 219: Properties Editor - Color tab request color.

8.2.3.4 Font Tab

The Font Tab allows you to choose a font for your gadget text. You should use this very carefully as different fonts than the standard not everywhere supported! Different fonts are not shown in the form.

Use this Font – turns on the selected font or uses the system standard font. Turning this feature on results in a LoadGuiFont() and SetGadgetFont() inside the source code.

Change – opens the system fontrequester below.

Choose another font, the style you need and a size.

Check the style in the right "Set Style" group.

If you need bold, italic or underline you can always set it directly without using the requester. The example at the bottom shows right away how it will look like.

The Example area is a textarea, thus you can scroll down when using bigger fonts and you can type also character not shown to test them.

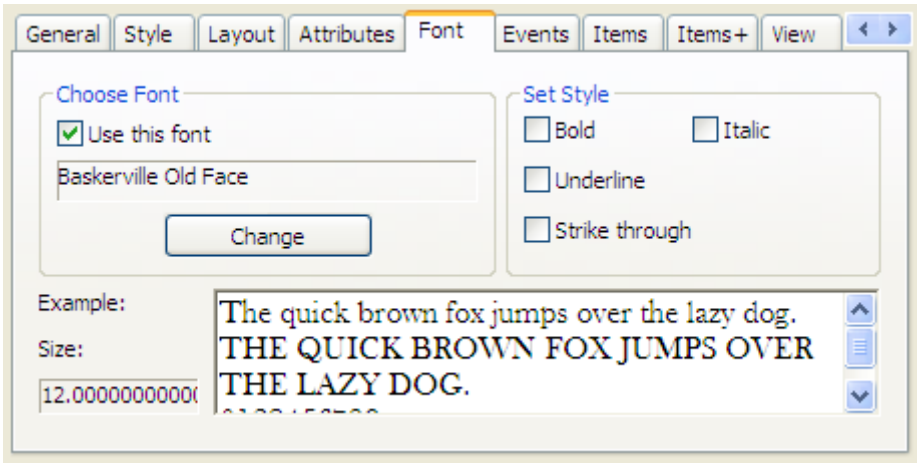


Illustration 220: Properties Editor - Font tab.

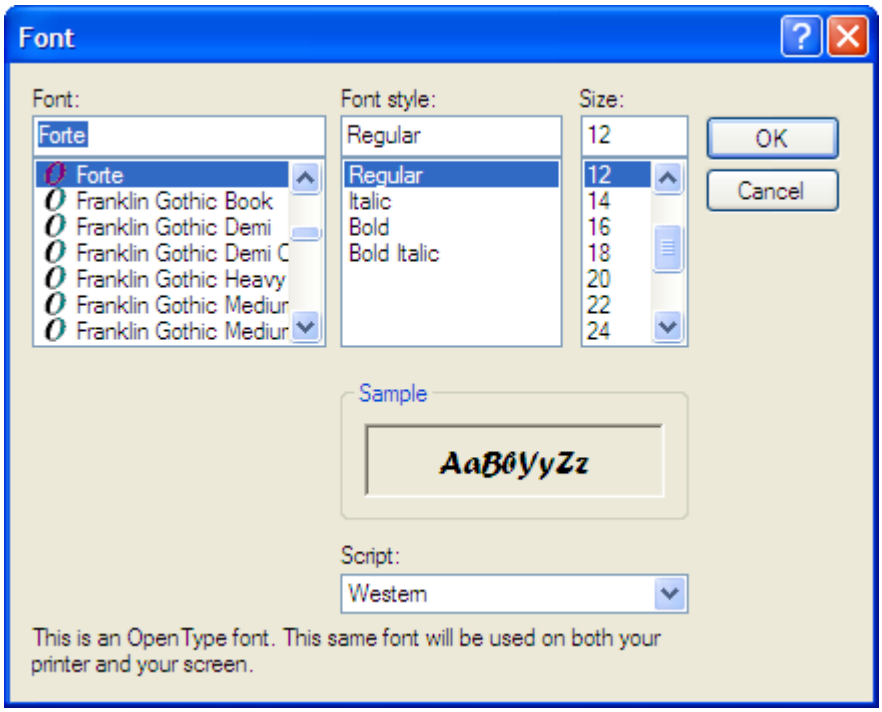


Illustration 221: Properties Editor - request a font.

8.2.3.5 Events Tab

Events are the heart of the gui system. When a user clicks, for example, on a button, an event is produced and your program should then react on it. You can do so by filtering on the event in question and run your own code. Depending on the gadget, events which are produced are different. Logic Gui shows under the event tab all possible events this gadget has. Some are already switched on by default, this can be customized in the ini file.

When you have a certain event switched on, this event will produce an entry in the event loop, thus automatically filtering your event and gadget. To keep the event loop clean no code will be inserted here but a function with all parameters will be called.

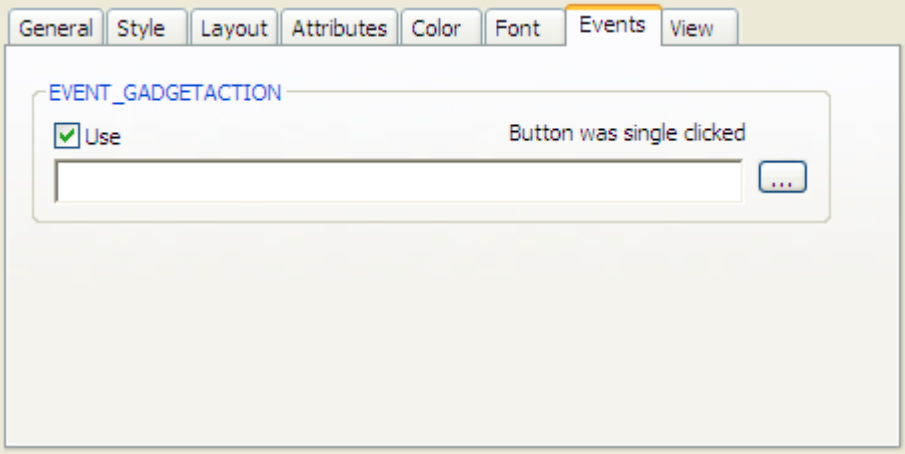


Illustration 222: Properties Editor - Common tab – Events - Button.

The example above shows the event tab of a button which supports only one event and is hence quite simple. An EVENT_GADGETACTION event is produced when a user clicks on the button.

Event Loop:

```
Repeat
        WaitEvent()
        Select EventID()
                Case EVENT_WINDOWCLOSE
                        Select EventSource()
                                Case Window1    Window1_WC( Window1:TGadget )
                        End Select

                Case EVENT_GADGETACTION
                        Select EventSource()
                                Case Button1    Button1_GA( Button1:TGadget )
                        End Select
        End Select
Forever
```

Here we see the event loop and can recognize the "Case EVENT_GADGETACTION" where we filter the event type and with "Case Button1" the source of the event, this is important as we could have many events produced by many gadgets and of course also many different buttons, which produce all the same event type. And we can see the function call: "Button1_GA(Button1:TGadget)"

Function:

```
Function Button1_GA( Button:TGadget )
        DebugLog "Button Button1 was pressed"

End Function
```

The function name is put together out of the gadget name and a shortcut of the event type. GA = GadgetAction, WC = WindowClose and so on. So, when looking at a function you should be able to immediately recognize to which gadget it belongs or which event is processed here.

Underneath every checkbox of an event there is a place to put your code, but you don't have to! For a small

line of code that is probably ok, but for more code to insert, call the Event Editor which will be activated when you click on the [...] button at the end. There you have enough space, always a view on your full code, syntax highlighting and much more. If you enter any code it will be inserted into the function called by the event.

***Note:** When you switch off an event your code will stay for later use, but no event filter and no function will be inserted into the created source code!*

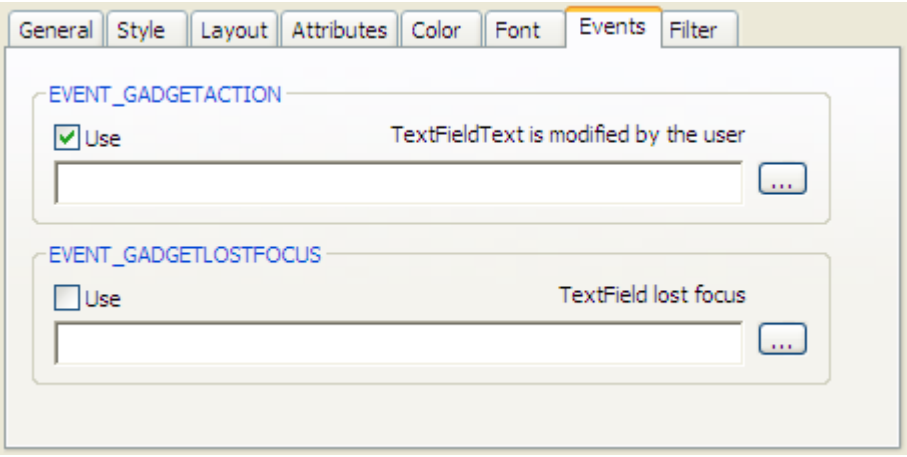


Illustration 223: Properties Editor - Common tab - Events - TextField.

Now we have a look onto the events of a textfield. We see again an EVENT_GADGETACTION, but this time the meaning is a bit different. To help you differentiate those, a small description is displayed next to the checkbox. While you may agree that this event is important as you want to know if a user typed some text, the second event EVENT_GADGETLOSTFOCUS is not used that often and is switched off by default.

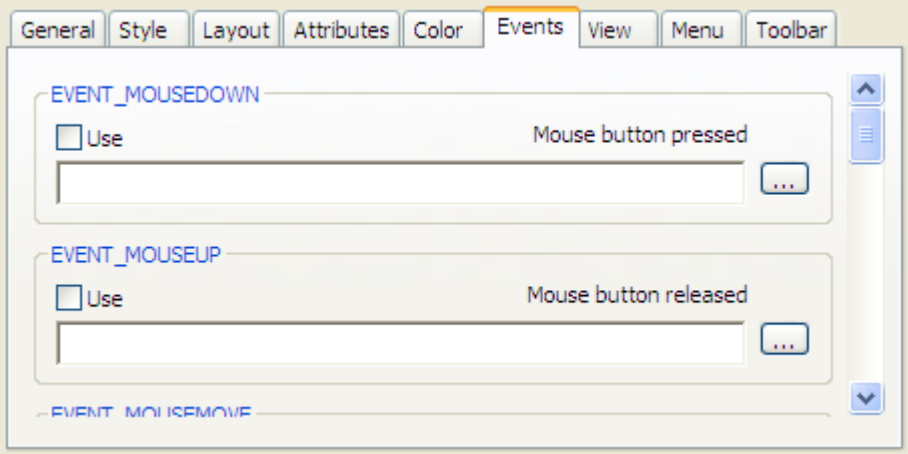


Illustration 224: Properties Editor - Common tab - Events - Panel.

Some gadgets can produce a lot of events, like panels or canvas. Scroll down to see all events of the selected gadget (use scrollbar or mouse-wheel).

8.2.3.6 Items Tab

The Items Tab is a simple, fast and efficient way to put some values into a list based gadget.

Enter just all your items separated by a comma.

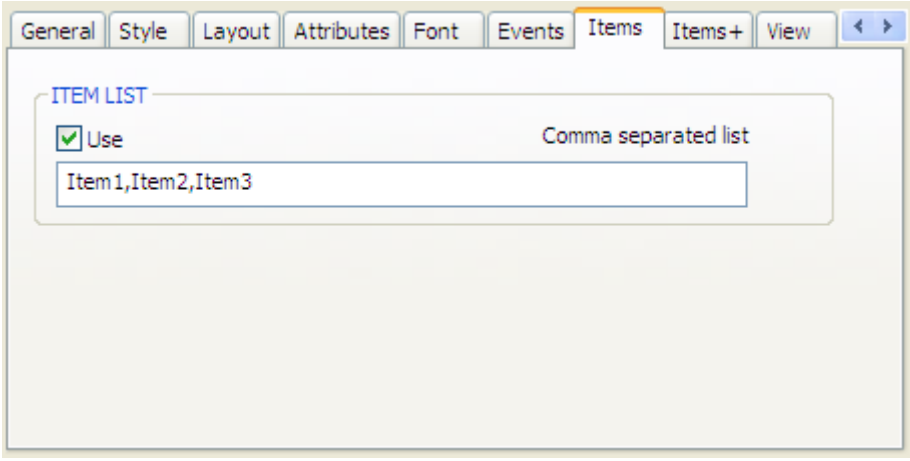


Illustration 225: Properties Editor - Common tab - Items - Listbased Gadgets.

If you enable the list, the source will be created accordingly, otherwise just stored for later use.

8.2.3.7 Items+ Tab

The Items+ tab is there to give you full control over the items in a list based gadget (Tabber, ListBox, ComboBox, TreeView). That means including icons, tip and extra object.

When you have used the Items tab before, you will see the same content you entered previously and the "Use Items" checkbox is enabled. Otherwise everything is disabled, except the "Use Items" checkbox or the "Load" button. Using one of them enables what you could use next.

***Note:** If you enable everything else than "Use Items", you can't edit the list anymore via the normal "Items" tab!*

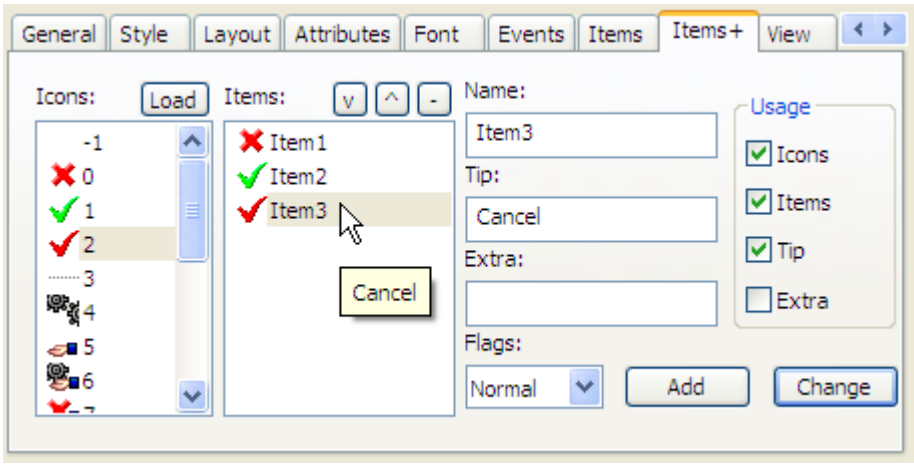


Illustration 226: Properties Editor - Common tab - Items+ - Listbased Gadgets.

When icons are needed push the load button on top of the left listbox and choose your iconstrip. The icons don't have to be in the correct order yet. While inserting new items you can choose which icon you need, only exception is a toggle icon where the first and second icon need to stay together (MaxGui behavior), but those iconstrips are normally used in toolbars only.

If a strip is loaded and you hover the Load button, the path to the strip is shown for later reference.

***Note:** When reloading a toolbarstrip the icons are automatically changed to reflect that, but if you made the new strip smaller you may not see old references to now unavailable icons. All references to not existing icons will default to icon 0 (the first icon of the newly loaded strip). All event functions, tips and extra information will be kept. You can then delete all unused entries or rearrange the icon type.*

The icon can also be changed at any time by first selecting the item and then just choose a different icon. The new icon will appear immediately.

Name and tip of an item are supported for multi language. The tip is also visible while hovering the items in the Item listbox as quick reference.

Add

If you need more than one item with the same icon, it's now the time to select it. Add the item(s) you need and the selected icon will also be added automatically.

Change

If you like to change some items afterwards, select the item, make you changes and push the change button!

Remove

You can remove an item from the list by pushing the small [–] (minus) button on top of the item listbox. When deleting a tabber tab, you will get a warning that all nested Gadgets for that tab are lost. All other tabs are moved to close the gap accordingly.

Flags

The Flags combobox allows you to choose between a normal and a default item. You should select only one item as default item. The default item will be selected/highlighted in the list based gadget.

Extra

The extra field of an item can hold of course any type you want. I don't know what your program later on does, so Logic Gui defaults to a string you can enter here.

Usage

In the Usage Group just decide what type of source should be created.

Move items up and down in the list

The position of items can be moved. Two buttons for [^] up and [v] down lets you move an item inside the listbox to a new position. If the list based gadget is from type tabber, all attached gadgets will move accordingly. You can do as many moves as necessary in one go. This is quite handy when you want to insert a new item in the middle, just add the new item and move it to the required position.

8.2.3.8 Menu Tab

The Menu Tab shows menus previously created! Menus are created in the Menu Control Center Window.

Double click the menu you want attach to the Window and check the checkbox. If you attach a menu to your window the window style is also altered automatically to include the menu. Not only window menus, but also popup menus (on right click, wherever available) are supported in Logic Gui.

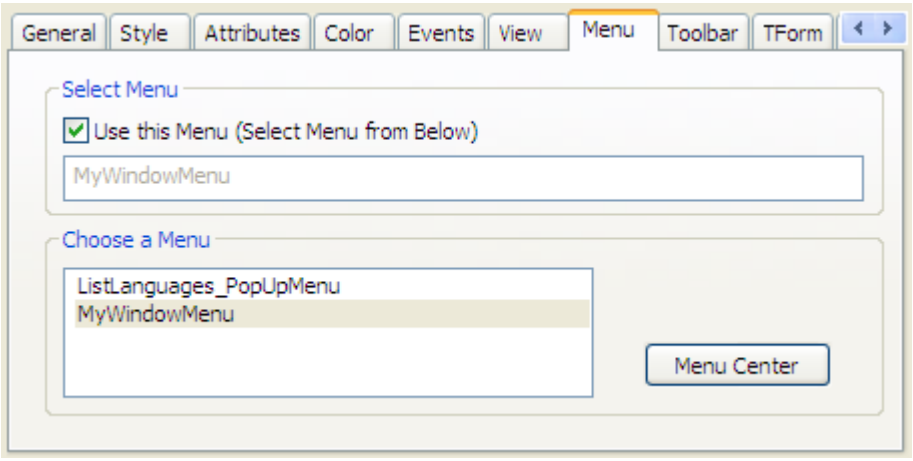


Illustration 227: Properties Editor - Common tab - Menu - for window gadget.

8.2.3.9 Toolbar Tab

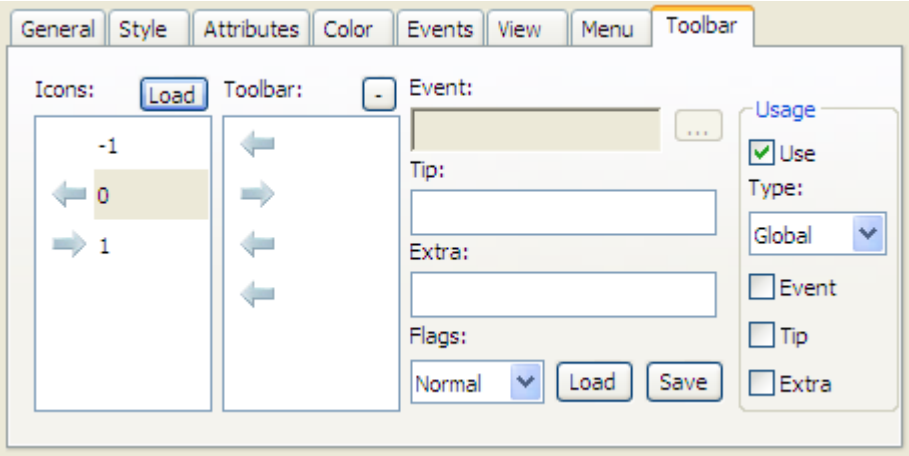


Illustration 228: Properties Editor - Common tab - Toolbar.

The Toolbar tab is quite similar to the Items+ tab, so let us look how it works:

Load

You need at least some icons, so you can load your iconstrip here. This will also enable the rest of the gui. When loading the icons, they will be put also as default in the same order into the toolbar. So, if the order is correct you only need to modify the extra information you need, otherwise select the toolbar item and then one of the loaded icons and the icon of the toolbar will immediately change.

***Note:** Double clicking on an icon in the Icons listbox will add the icon to the toolbar, thus you can assemble your own order, but be careful with toggle icons!*

Remove

Select a toolbar entry and click on the [-] button at the top, this will remove that entry and select automatically the previous entry, allowing you to delete several entries in one go.

Event

Enter here your code which should be run when the user clicked on that toolbar icon. As the space is quite limited in this toolbar tab use the Event Editor [...] to do so and use the textfield only as visual feedback.

Tip

The toolbar tip which shows up when you hover over the icon in the toolbar, here also visible in the listbox.

Extra

The extra field of an toolbar icon can hold of course any type you want. I don't know what your program later on does, so Logic Gui defaults to a string you can enter here.

Flags

The Flags combobox allows you to choose between a normal, default and toggle icon. The normal icon is a standard not selected icon. The default icon is a selected icon and the toggle icon is an icon which can toggle it's first state with the next icon in the strip, thus good for things which could not only be selected once but can stay selected and showing this with a slightly different icon (could also be the same icon).

Usage

Turn on or off what you need in your source code and choose the type of the toolbar.

Load / Save

As a toolbar could be useful at different places, you can save and load it separately from the form. A XML file will be created (does not include the iconstrip itself, only a link) with all meta data inside.

The next time you can load this ready to use toolbar and you are done. Even if you didn't save the toolbar separately but it is contained in a form save, the load will find it and load (only the first). Alternatively you

can drop the .TLG (Toolbar) file onto the Workspace. The dropped Toolbar Set will be automatically added to the WorkSpace window and applied.

***Note:** The form itself saves the toolbar settings always!*

As there is no add button we also don't need a change button! Every change is done on the fly to the selected toolbaritem.

8.2.3.10 Filter Tab

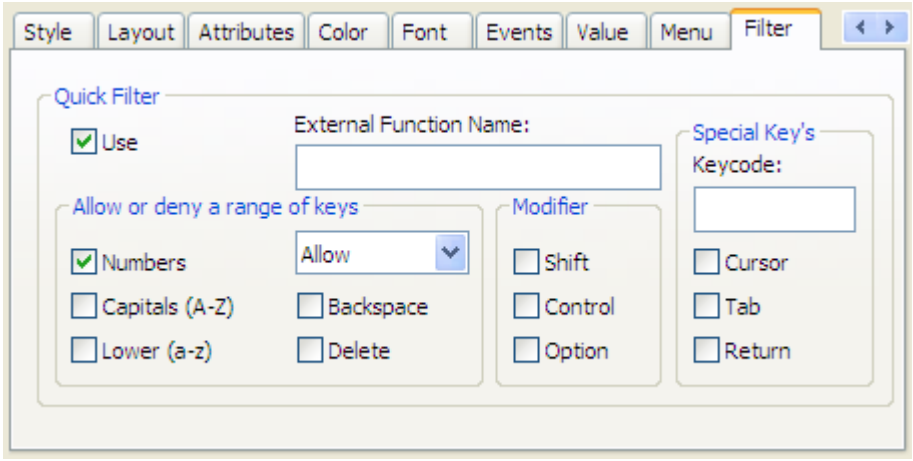


Illustration 229: Properties Editor - Common tab - Filter.

For TextFields and TextAreas there is a "Filter" tab. You can very easy filter your textinput and allow or deny for numbers, capitals, lower case, tab key, return key and others and any combination of it. If you specify a certain key that one will be included in your choice. This filter can be fast and easy for a lot of uses, but not for everything, so if nothing fits your need just specify the Name of your own function and it will be included in the source instead. Your own function should then be included via the Header or Append file.

8.2.4 Application Tabs

Under Application we will find all settings which act application wide. Either the setting varies the source code directly or modifies how it's written. Here you can directly alter the files Logic Gui includes in the source for instance.

8.2.4.1 Naming

This tab changes the output of the source as it puts a string before or after variable names or functions.

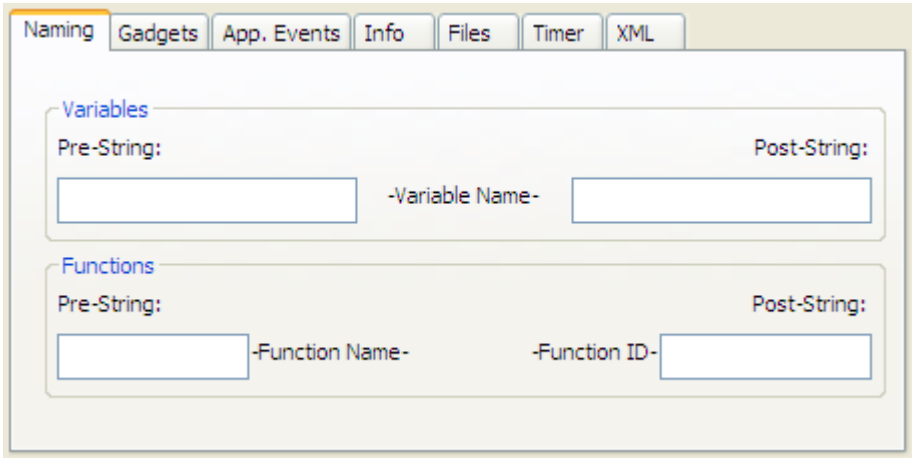


Illustration 230: Properties Editor - Application - Naming Tab.

What is it used for:

When you stay most of the time with the build-in-naming for gadgets and don't take your own (which you shouldn't do, but...).

Button1, Button2, Textfield1... and you create the first window for your application everything is just fine. But when you come back to Logic Gui and design the second window, the buttons and other gadgets will have the same names. This of course is not allowed in one application. To overcome that problem you can for example put a small string in front of your variables and functions e.g. Win1_ or Win2_ ... after that no more conflicts occur.

Button1 will be Win1_Button1 and in the second output Win2_Button1 and so on.

The entries in the Naming tab are also stored in the form. The form overwrites the setting from the ini file (as usual). That means you can have prefixes and suffixes different for every form and also different from the defaults which are used on a new form only. Again, you should use good and descriptive names if possible, also using the window type creation is another way to coordinate your naming space.

8.2.4.2 Gadgets

Some gadget related stuff is grouped together in the Gadgets tab.

GadgetCommander

The Gadget Commander is used to do certain actions on a bunch of gadgets in one go. This checkmark will be automatically set when you insert a Gadget Commander command from inside the Event Editor. Once enabled, a TList with all gadgets is created (the GadgetList) and transferred to all functions called by the events. This list is used by the Gadget Commander, but you can take it also for your own stuff. Additional the Gadget Commander function will be added to the source and some variable declaration.

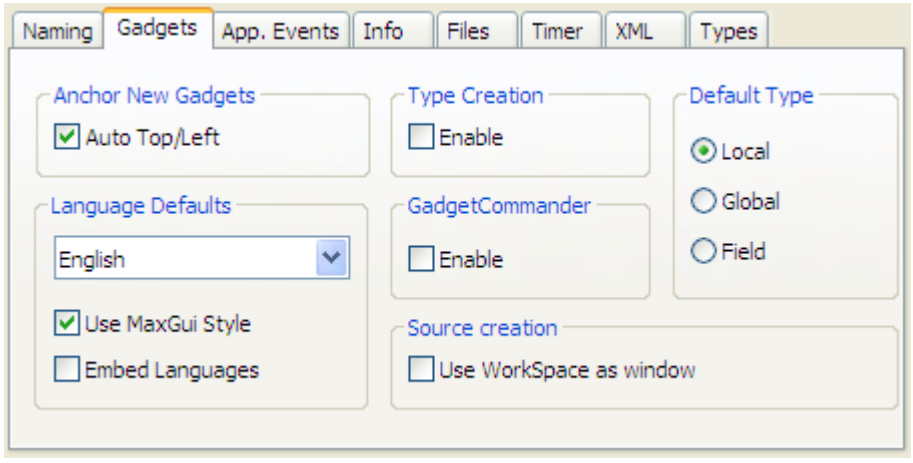


Illustration 231: Properties Editor - Application - Gadgets Tab.

If you don't need this anymore uncheck the checkbox. The default of this option can be set in the ini file.

Default Type

Define the default of the variable type - Local, Global, Field. Every new Gadget will use this default setting. If you start a new form the setting is taken from the ini file "VariableType" 0=Local 1=Global 2=Field. The VariableType is also saved and loaded with the form.

Default Language

Use the combobox to define the default language of your form. The default language will be added automatically to your Language Window when not yet present. You can change the default language at any time. The Logic Gui ini file is updated with a Language entry and set to "English". This default language is used if you start with a new form, otherwise it is taken from the loaded form. If you change the ini file to your mother-tongue please use the correct id as it is defined in the Lang.xml file!

Use XML or MaxGui style localization! (XML set up uses an extra tab)

The first checkbox enables you to have the source code generated with the MaxGui localization style. The second checkbox let's you embed all existing languages into the source code. Either embed defined languages or load them via the LoadLanguage:TMaxGuiLanguage(url:Object) command from an ini file created beforehand.

For MaxGui style localization, the Gadgets, GadgetItems and Menus are localized. A header will be created to define all used languages and for every gadget the text and tooltip are set up as language tokens. The source is changed to access the tokens and the gadget localization is turned on.

Source Creation

You can now disable the source code creation of the Workspace (Window). All windows directly on top of the workspace will switch on the 'Independent' style and act completely stand alone. Gadgets directly on the workspace but not in a window will not produce any code output. A default setting is available in the ini file (added to the 'SourceCode' line) -> Use_WorkSpace = 0/1. This setting will be used during startup and when starting with a 'New' form. Every form will store it's WorkSpace usage under the Application part and will be loaded with the form. If you decide to work without the workspace, still give the window gadget name a valid name, as it is used for example for all application events.

Type Creation

Independent types are generated for every window when enabled. The name of the type is generated by the window gadget name and the window extend (comment field). For example: the window gadget name is Win1 the resulting type would be 'TWin1'. The type extend (comment field) can be used for additional keywords, for instance to extend the type: 'Twin1 Extends TForm'.

When switching on the type creation the default variable type for new added gadgets is changed to 'Field' if it was 'Local' before and vice versa. If your default variable type is 'Global' nothing is changed and you need to take care yourself.

When switching between type creation and the classical WaitEvent() loop, Logic Gui will check the variable types. A requester will show up when 'Locals' or 'Globals' are found and may should be converted to 'Field' or vice versa. Ok, does the conversion and Cancel leaves it to your responsibility to have the right variable type for the chosen workflow.

An extra dialogue pops up when switching on the type creation, but your TForm Management type is still off (and lets you turn it on). Also the WorkSpace window will be forced to off.

The TForm type will be automatically imported when Logic Gui type creation is enabled and the TForm type is chosen in the types tab.

When you add a new window to the form, this window will automatically get the "Extends TForm" applied in comment textfield. Existing windows with 'no comments yet' get also the "Extends TForm" applied in comment textfield. This should save some typing and may help not to forget to define a window manager.

8.2.4.3 App. Events

Logic Gui supports also the Application Events (Suspend/Resume/Terminate).

Every Event when active will add also a function and every function can load an external function file as

known from the other events. The three function files are also available in the FunctionCode directory. Of course all settings are stored and will be loaded with the form again.

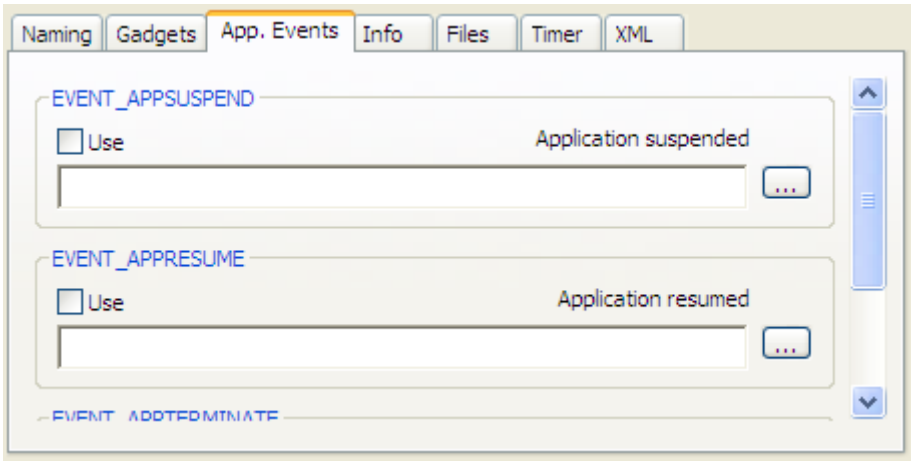


Illustration 232: Properties Editor - Application - App. Events Tab.

8.2.4.4 Info Tab

You can enter an author info and a program description. Both infos are saved with the form. The author info can be preset in the ini file. Both Infos are also put into the source when enabled via the checkbox button.

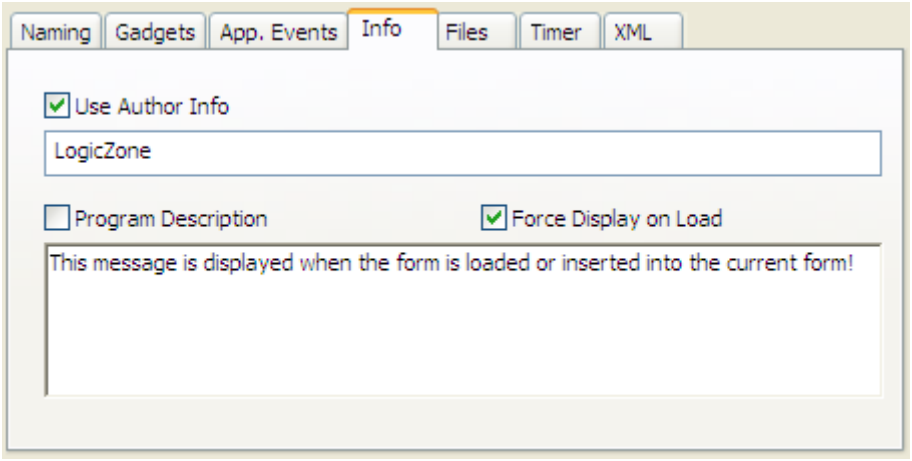


Illustration 233: Properties Editor - Application - Info Tab.

Another option is 'Force Display on Load'. When checked the text entered in the description will be displayed when Logic Gui has load the form. Thus you can use the description also as a form note, which will be displayed to anyone who loads this form. It can act as a reminder for yourself (for template forms perhaps), or as an important description to others, if you share the form.

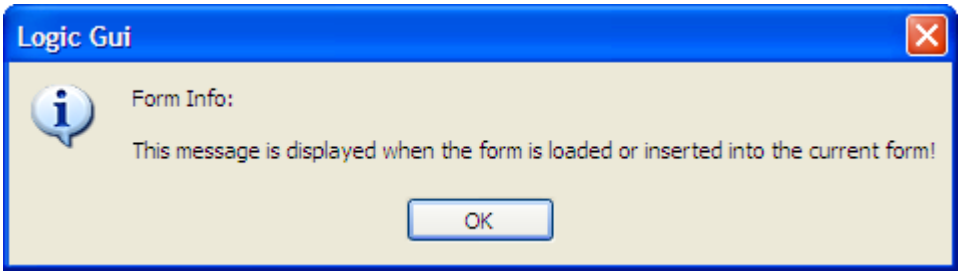


Illustration 234: Properties Editor - Application - Info - Force Display on Load.

8.2.4.5 Files Tab

To have some comfort in using external files you can enable, disable and choose which file should be used!

Those external files are included in different positions inside the source code.

Every form can have it's own files. When starting with a new form the preset is taken from the ini file. Via a checkbox you can decide if you need a file or not. And you can immediately edit this file directly from Logic Gui, thus very easy to add a variable or similar.

The path to those files can be relative or absolute. Export saves the files with your form and Import reads it all in again. The current form will store state and url.

When you decide to use a certain file, you type the name or browse for the file. If the file doesn't exist Logic Gui will prompt you to create one file or you could browse to the location where you want the file and just right click in the (browse) window and choose a new (text) file.

Inside the Logic Gui folder we find the Header.txt and the Append.txt as an example (because often used), but you could use any other name or location (Imports.bmx or so). Every form can have it's own header, append, rawevent ... file! When you put your forms in different folders, you can use the same name, which makes it a bit easier.

A good idea is may to put some template files in the Logic Gui folder. With template files I mean that you could define some imports you always use and if you like Superstrict, or just only Strict – this could go into the header file. And you could also define some functions you may have collected and always use with you gui and put it in the append file...

When you start a new form those files are ready to use, but stop – if you alter them they are not so useful any more. That's the reason you should use 'Save as' for your new form. All application files which are selected for use are copied to the new location where you store your new form! Use a new extra folder for the new form, don't put all the forms you create in the Logic Gui folder, separate them. Of course you can add other files later.

Header File

The Header file is put on top of the source code. This is the right place for your own imports, includes and variable declaration.

Gadget File

The file is inserted between the gadget creation part and the event queue, thus you are able to activate certain gadgets or any other gadget initialization.

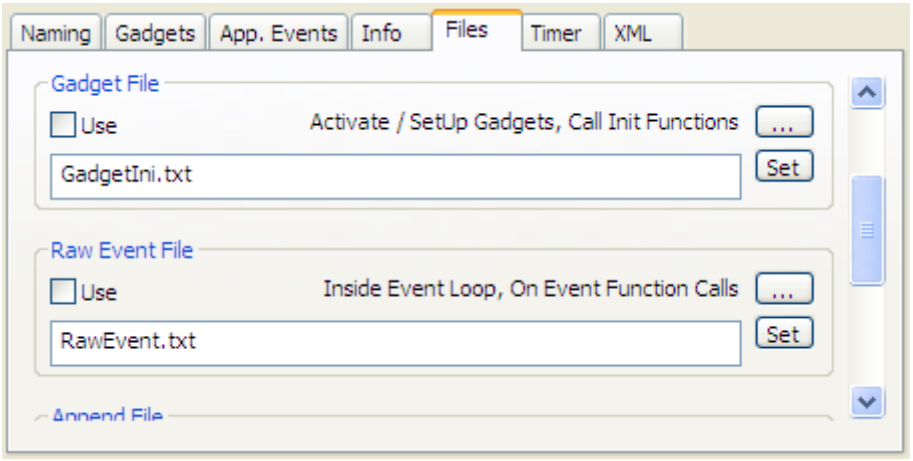


Illustration 235: Properties Editor - Application - Files Tab.

Raw Event File

This extra file is inserted at the end of the event queue (but inside the queue), thus you are able to put commands which are either not related to any event, or call your own on_event queues of external types.

Append File

The Append file will be attached to the source at the end of the generated source. Mainly used for gui supporting functions, but you can add what ever you need.

Function Code Files

For every event there is .bmx file available in the FunctionCode directory. This .bmx file is included in the function called by the corresponding event if available. So, you are able to insert always a fixed part of code for every event.

You can select if you want to use the FunctionCode Files or not. If deselected no source code will be inserted from those files ('start adding ... 'end of...) and no export of those files will take place. When selected, the FunctionCode Directory is also exported and can be imported later.

Note: *When using any of the Header, Gadget Ini, Raw Event or Append file and the path is not correct or not*

available then you will get a similar notification inside the source: '> > > HEADER FILE NOT FOUND !!!

Custom Folder Structure

When creating a new project it is also possible to automatically create some folder structure you always use again and again. As you might remember Logic Gui copies certain files when you use the 'Save As' option. This is the way to make a new project. It helps you to have a separate and independent copy of the original and thus every other project can serve as a template.

The option 'Custom Folder Structure' is located at the bottom of the Files tab.

You can enter folder or folder and subfolder structures into the TextArea.

Separate all entries by a return and Logic Gui will create them the next time you do a 'Save As' automatically.

Example of a list of folders:

gfx

sfx

data

skins

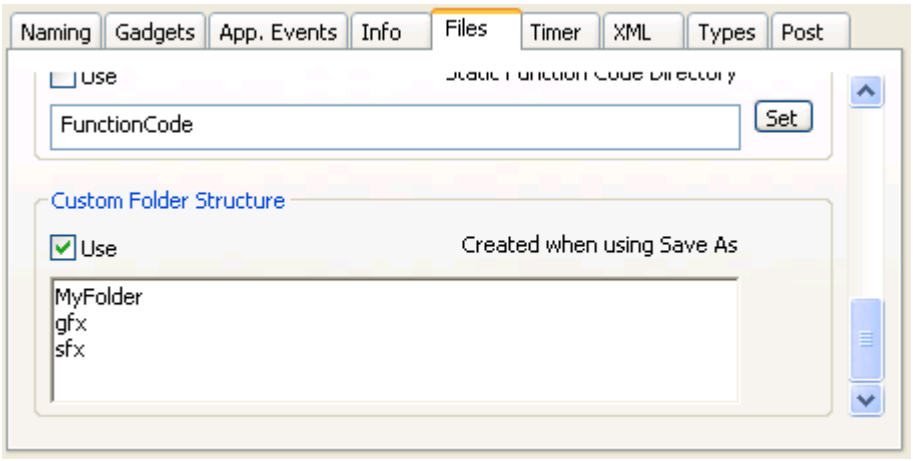


Illustration 236: Properties Editor - Application - Files Tab. Custom Folder

Example of folders and subfolders

data/level1/level2/level3

data/maps

data/languages

sfx/sound

sfx/music

Folder with spaces in the name

others

If you enter some of the forbidden characters like :<>| and such, they will be replaced by an underscore.

This option saves a lot of time the bigger your standard structure looks like, but is also useful if you just need a few folders.

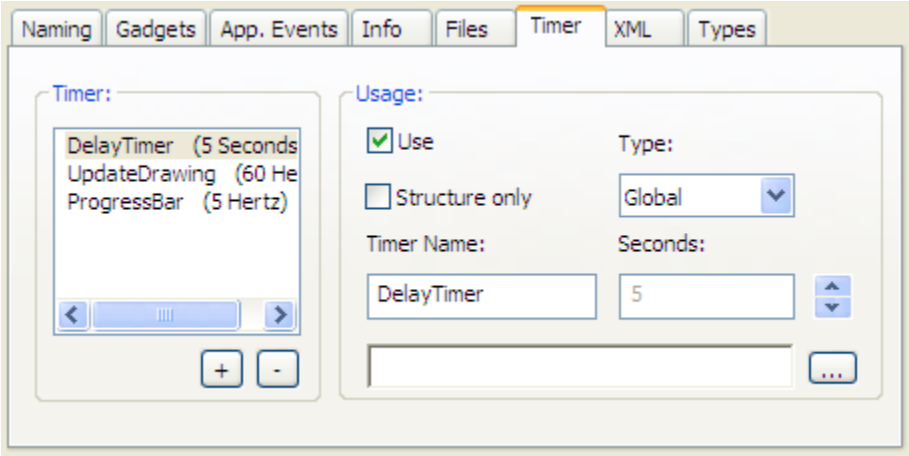


Illustration 237: Properties Editor - Application - Timer Tab.

8.2.4.6 Timer

First of all there are two different modes this application timers work in, but the GUI stays more or less the same! Which mode is active is defined by the fact if you enabled type creation for your form or not.

If you don't use type creation from Logic Gui (Application/Gadgets/Type Creation) and you use a normal Wait Event Loop then the timers are just normal BlitzMax TTimers.

You can add your own timer to the application/form. Every defined timer when enabled will create an entry in the event queue and a corresponding function. If you define "Structure only" the timer will not start but you have to do it manually somewhere in the code, otherwise the timer is started directly at application start. For every timer there is the possibility to add your own function code and every function will include the external function code file (FunctionCode/Timer_TIMERTICK.bmx) if available. The timer hertz tick can be defined in Hertz, or Seconds when going below 0 Hertz. Click on the "+" button to create a new timer and change the settings to your needs. Click on "-" to delete the selected timer. Click on a previously defined timer to change the settings. All timers - if enabled or not - will be saved and loaded with the form and are ready to use or to enable/disable. Choose between Local, Global and Field variable type as you need. Again global and field variables are placed in the header.

But if you use type creation then a normal timer would not fit into the generated structure and a better and more independent approach is chosen. Logic Gui comes with an extra type, the TFormTimer, which is used and let you define a single function which is called on every timer tick. See more info below and an example in the “Types” tab.

8.2.4.7 XML Tab

XML in Logic Gui is divided in two parts.

XML File

You can set the use and the filename of an XML file which Logic Gui then creates for you. You can predefine the values using the ini file as usual. State and url are also saved with the form. Each gadget will get an entry for it's shape x,y,w,h, text and style and so on. A list based gadget will also have entries for their items (text and tip). The URL of every external

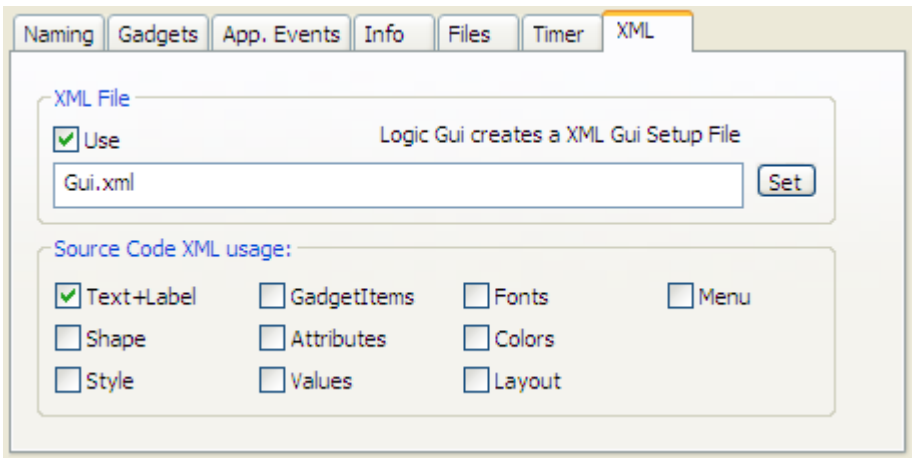


Illustration 238: Properties Editor - Application - XML Tab.

file is stored and also values for e.g. sliders. Menues are stored with their structure.

This file can then be used to read in again during runtime to set the gui. As the file is a normal textfile it can be modified and thus the gui.

Source Code XML usage

Some checkboxes helps you fine tune the xml usage in your source code. If an item is checked, it means instead of the static value out of Logic Gui the 'dynamic' value out of the xml file is taken during gadget creation. E.g. Instead of CreateButton("Klick Me" ,1,1,23,75,win)... Logic Gui produces CreateButton(GetText("Button1"),1,1,23,75,win)... and thus the Label is taken from the XML file during runtime. If you selected the Text checkbox only, to have the Gadget Label loaded, the static text is replaced by the GetText() command but if you selected more options Logic Gui will load a special TguiGadget, which then serves as input to the source. All those commands are in a mod written for Logic Gui called 'LogicXML'. That means if you like to use the xml functions you need to install the module. If GadgetItems are enabled, items are added to the list based gadget from what is stored in the XML file, but not the Tabber from Logic Gui because there could be many other gadgets on top (manually you can though).

As LogicXML supports also menu loading from the xml file if the 'Menu' checkbox in the 'Source Code XML usage' area is selected. The menu is then not anymore hardcoded but loaded during runtime from the xml file and created. The source code will change to use the LogicXML commands to load the menu. Loading a menu during runtime gives you quite more adaptive potential, but has one drawback: Logic Gui does not know the menu gadget handle which is created and is thus not able to send this handle to the function as parameter when an event occurs. Look at the function called by an event to see the difference (turn on / off the xml menu checkbox). Often this handle is not used but when, then you need to retrieve it from the GadgetList while using xml menus.

```
Local Win:TGadget = CreateWindow:TGadget(G.Text,G.x,G.y,G.w,G.h,NULL,G.Style)
        SetWindowMenu( Win:TGadget, "MenuToImport" , "Win" )
        UpdateWindowMenu( Win:TGadget )
```

Illustration 239: LogicXML - Menu loading.

Logic Gui uses the SetWindowMenu command from LogicXML.

```
Function Win_open_MA( Window:TGadget , GadgetList:TList=Null )
    DebugLog "Menu open was selected from Window Win"

End Function
```

Illustration 240: LogicXML - menu function call.

Function Call when menu was created from LogicXML.

```
Function Win_open_MA( Window:TGadget , Parent:TGadget , Menu:TGadget , GadgetList:TList=Null )
    DebugLog "Menu open was selected from Window Win"

End Function
```

Illustration 241: Logic Gui - menu function call.

Function Call when menu was created by Logic Gui.

8.2.4.8 Types Tab

Here you can configure from where to load external types which should be included in Logic Gui and it's usage. First type which can be automatically included is the TListView type. The usage is turned on by default and the path set to 'ExternalTypes/TListView.bmx' in the Logic Gui folder. Normally this setting don't need to be changed at all, it's just there to be flexible in case... When you switch off the usage, then you need to take care yourself to include the type (for instance done in a general import already via the header file). The type is not included in Logic Gui to allow you to edit the content if needed. If a new BMax or MaxGui version forces you to implement some changes, you don't have to wait for a new Logic Gui version.

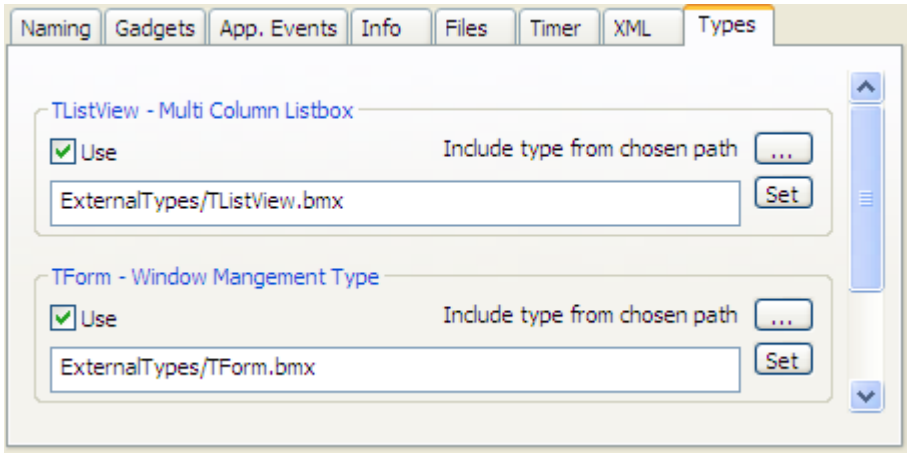


Illustration 242: Properties Editor - Application - Types Tab.

The usage of the type can be chosen per form. Any used type file will be copied during export.

Any set path are reset to the values found in the ini file when 'New' is clicked.

Second, there is a TForm type. The TForm type is meant as window management type. This type can be selected when needed (default is off) or you could also enter your own window management here. The first version of TForm handles the event handling between different instances of a certain form type. All created gadgets are extended and registered and handled automatically. A hook function acts directly on emitted events and sorts out where to sent them. Every form can have it's own TForm file. The TForm file can be exported and imported as needed with the form. This is used together with the type creation option in Properties/Application/Gadgets – have a look there as well.

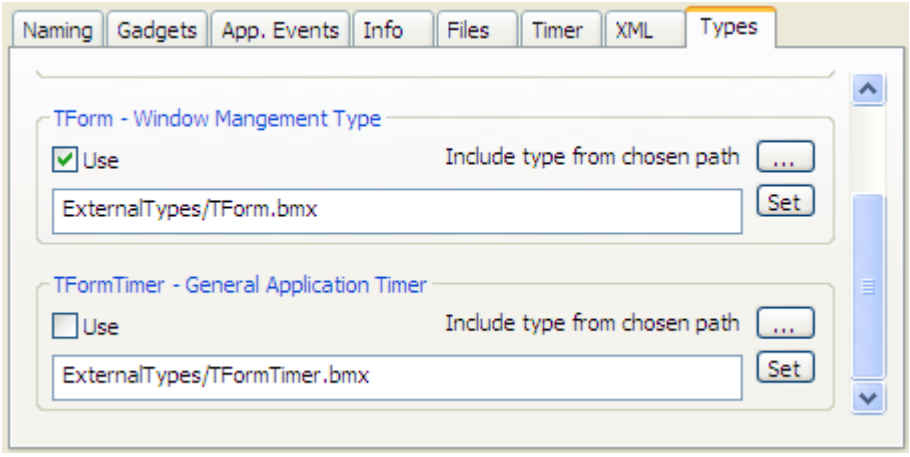


Illustration 243: Properties Editor - Application - Types Tab. TFormTimer

In the 'Types' tab there is also an extra entry for a TFormTimer type. Choose the usage and path here. The default path is set and points to the ExternalTypes directory, where a TFormTimer.bmx file is stored.

This timer type can be used as a general application timer. It hooks directly in the event queue and calls your code in the specified interval. This type is independent from the rest of the form and other generated window types. The TFormTimer type will be automatically imported when enabled and at least one global timer is in use.

When you add/switch on such a general timer you need to specify a callbackfunction, which is called on every timer tick. Type the name of the callbackfunction into the event textfield. For example 'MyFunction', that's all. The function must of course exist and of following syntax:

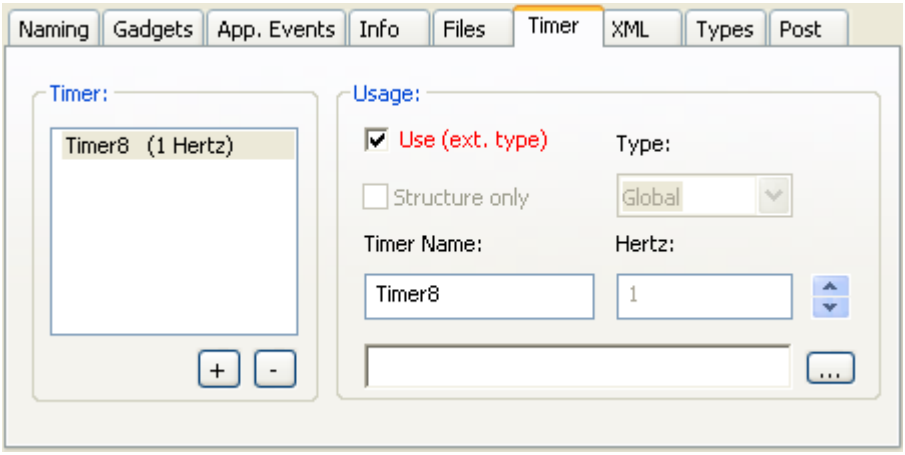


Illustration 244: Properties Editor - Application - Timer Tab. Global Timer & Type creation

Code:

```
Function MyFunction( Timer:TTimer)
    'Your code here (will be called on every timer tick)
    'The Timer:TTimer is a BlitzMax timer just hooked in the event queue to be independent of other events
    'it's only there as function parameter to have a reference in case you need it.
End Function
```

Probably best to put this function into the Append file or so.

If you forgot to enter the function name in the timers event textfield, which is mandatory, there will be an error text put in the source code, pointing to the problem:

```
Global Timer8:TFormTimer = New TFormTimer.Create( "Timer8",1,,ERROR: Define a Functionname in the timer event text! )
```

As global application timers don't need or use a certain structure, because that is defined in the external type, the “Structure only” and “Type” gadgets are disabled. The “Use (ext. type)” is written in red to remind you that it is not a standard timer but uses the external type to run.

When you add a timer and the external type should be used but is not yet enabled a requester will ask you to do that for you, thus helping to suppress an error as it is easily overlooked, when not often used.

8.2.4.9 Post Tab (PostProcessing)

This is meant to define certain actions after the compile process. If the Post tab is opened you can see two sections, the first one is predefined, it will call the UPX compression to crunch your application exe file if enabled.

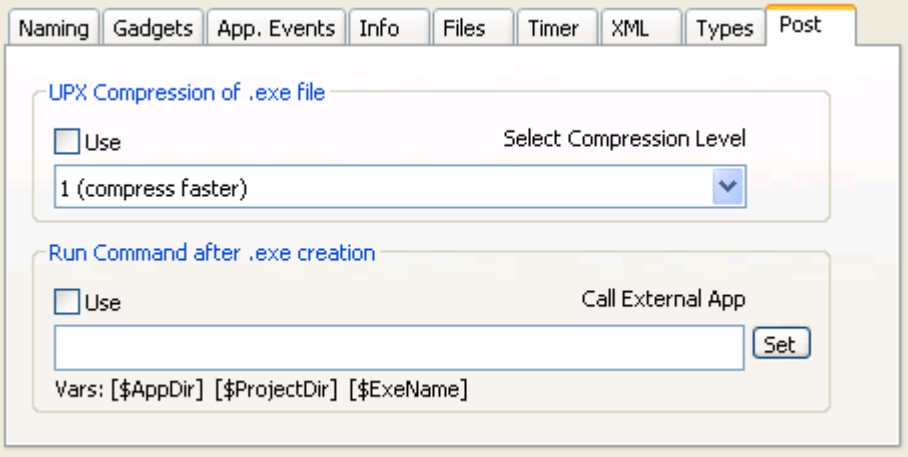


Illustration 245: Properties Editor - Application - Post Processing

When the path to the upx.exe is found the 'Use' checkbox is enabled and can be checked and a certain compression level can be chosen from the ComboBox where 1=less compression but fast, 9=good compression but slow, -best=best compression but very slow. In the Logic Gui distribution there is a new subfolder called 'PostProcessing'. You can put your scripts or programs you want to run here, it is not a must, but would help to keep all paths intact in case you move your Logic Gui installation or working from a USB stick. Copy the upx.exe into this directory to use it.

You can download upx here:

http://upx.sourceforge.net

The second section let's you run any command you need after a compile, that could be a simple copy, a batchfile or may a ftp to a webserver. It could create a new release package and so on. To help you create a useful command string there are some variables which will replace used placeholders. Placeholders are:

[$Appdir] will be replaced by the Logic Gui main directory.

This is useful when you refer relativ to the Logic Gui installation to one of your programs you want to call.

[$ProjectDir] will be replaced by the folder you create the exe file in.

As normally any project (Logic Gui Form) should live in it's own directory this helps you to find the current used one.

[$ExeName] will be replaced by the name of the exe file created by Logic Gui during compile

The name (without extension!) of your form and executable, of course most important for further processing.

The Placeholders are case sensitive!

Here is a simple example of an external command:

```
cmd /c Copy "[$ProjectDir]/[$ExeName].exe" "[$ProjectDir]/BlaBla.exe"
```

It will call the windows cmd.exe and /c is used to run the following command and exit afterwards. As you can see placeholders are used to form the command string.

8.2.5 Event Editor

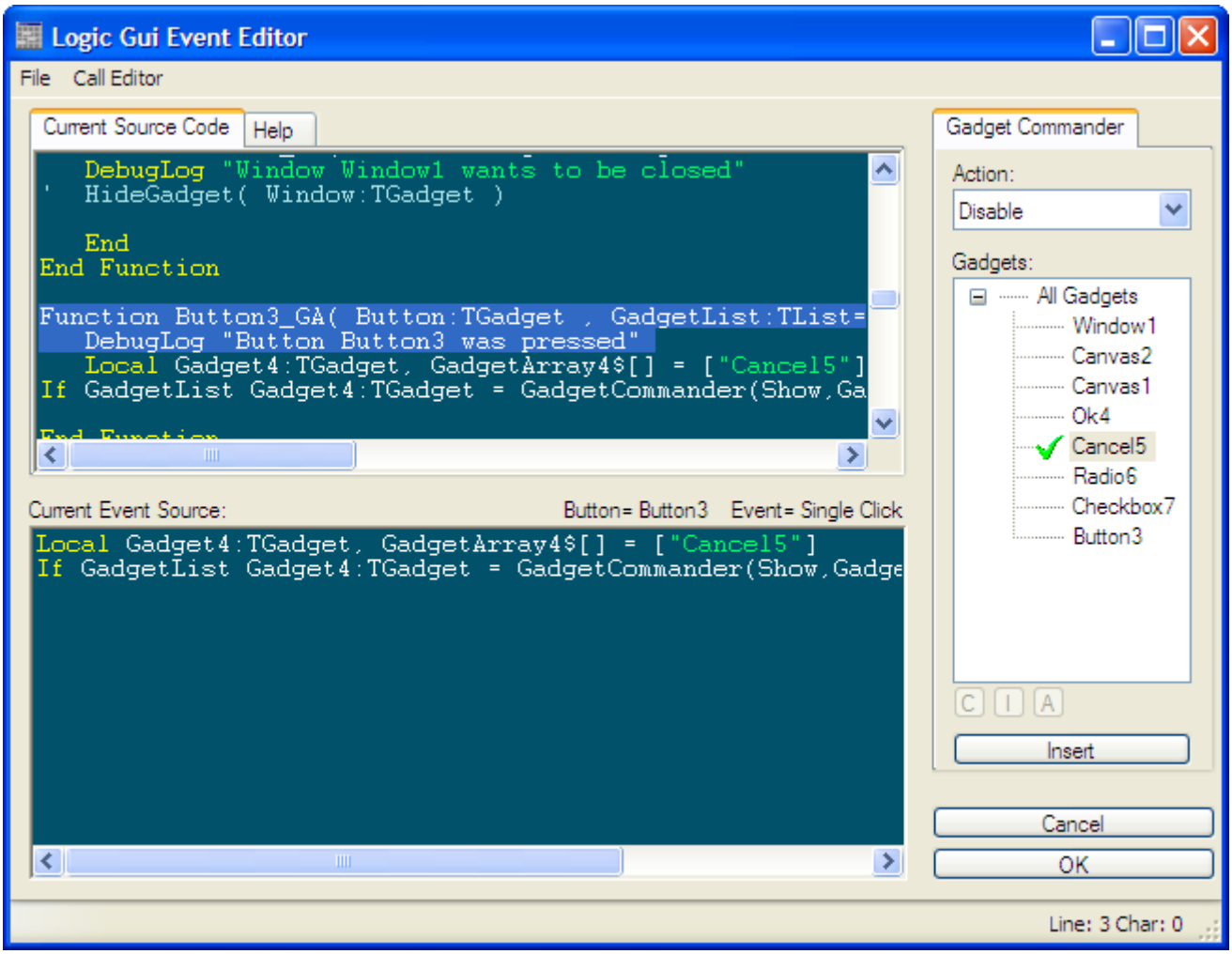


Illustration 246: Event Editor Window

The Event Editor is mainly there, as the name says, to edit the event functions/methods Logic Gui creates. Nevertheless also the files Logic Gui uses can be edited with it as well. Dependent from which location the Event Editor is called you will see in the right tabber only the Gadget Commander or additional the Events tab.

The window consists out of three regions, is resizable and has a menu. The top and bottom region is divided by a splitter and you can choose which part should be bigger, move the split accordingly. And also the right side is put in a splitter which can be moved to your needs.

In the Event Editor both textareas are syntax highlighted. This still does not replace an IDE but for sure you don't need to switch to your favorite editor if you only put a few lines. The color of the background and the highlight colors can be customized in the ini file - the standard colors of the maxide are preset.

In the statusbar of the Event Editor the current line and character is displayed for Source code or Event Text.

***Note:** When opening the Event Editor it enables the corresponding event of that gadget if not yet done, that saves not only one extra click but makes also sure that if you use your favorite editor the function you want to work on is already created inside the complete source code, thus you can start using it. (Gadget Events only)*

8.2.5.1 Current Source Code / Help

Top left is mainly for the current source code generated by Logic Gui. It reflects how the code looks for your current setup of the gadgets. You can't edit the source as it is created by Logic Gui upon your setup of the gadgets. This textarea has a popup menu, to copy selected code or to lookup which gadget and event

belongs to a certain location in the source (Event Editor needs to be opened from the Edit Events tab of the WorkSpace) and to let Logic Gui opens it for edit. Check out more information at Edit Events.

A second tab lets you view the help, if you never called for help the Blitzmax home page is shown. Press F1 twice on a command in the lower textarea. The Help tab opens and shows the full BlitzMax help of the selected command.

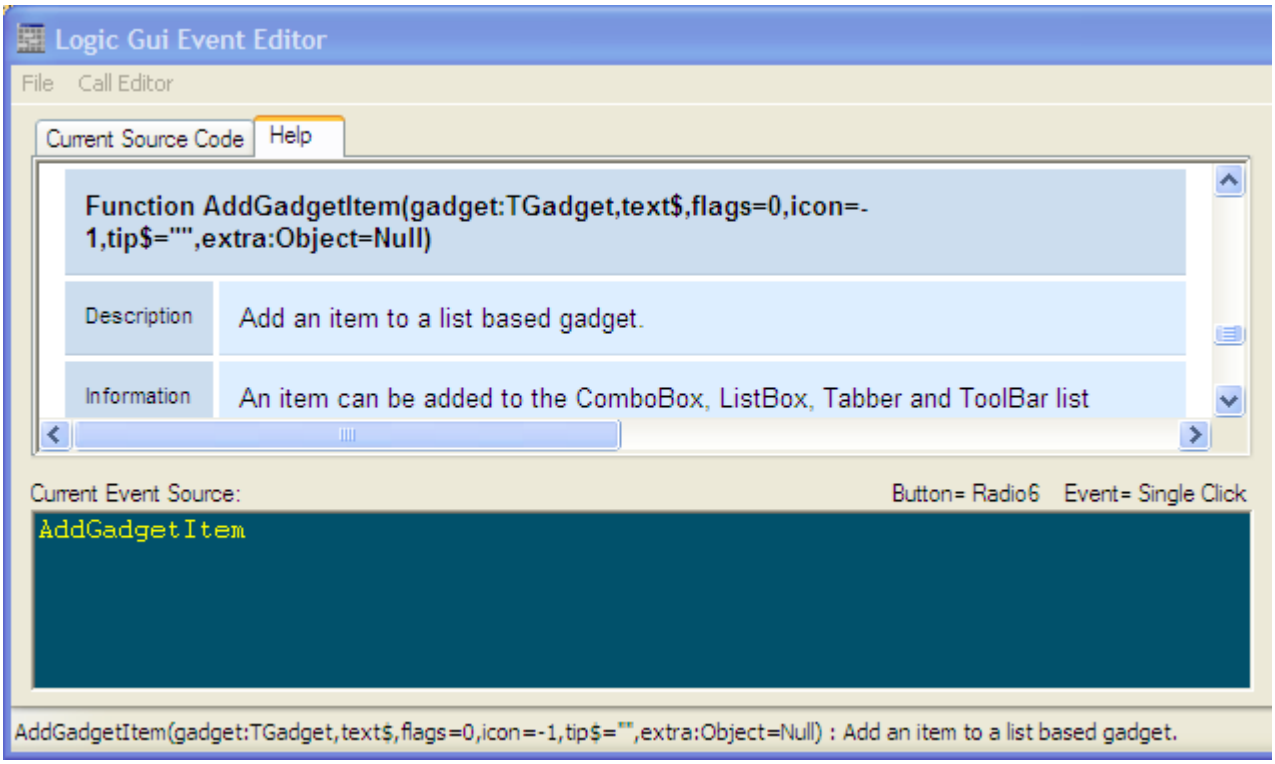


Illustration 247: Event Editor - Help tab and StatusText Help.

8.2.5.2 Current Event Source

Bottom left is for your input. Type whatever should be done when the event occurs. This text will be put into the function which is called by the event. And the text will show up underneath the debugging line(s) and if present underneath the source added by an external function file! In the line above you can recognize which event and which gadget the source will be added to.

When entering the Event Editor the bottom textarea is active by default and the cursor waits at the end of the text ready for your input (or if possible at the last known position).

Use CTRL-Z for undo and CTRL-Y for redo (both unlimited), or choose the right point from the right click popupmenu.

Press F1 once to get the syntax shown in the statustext of the Event Editor window (cursor needs to be on the command you want the help for). Instead of pressing F1 you can also right click on the bottom textarea and choose 'Help' from the popup menu.

There is also Drag and Drop Support for the Event Editor. You can drop .txt and .bmx files and they will be replace the text in the lower textarea.

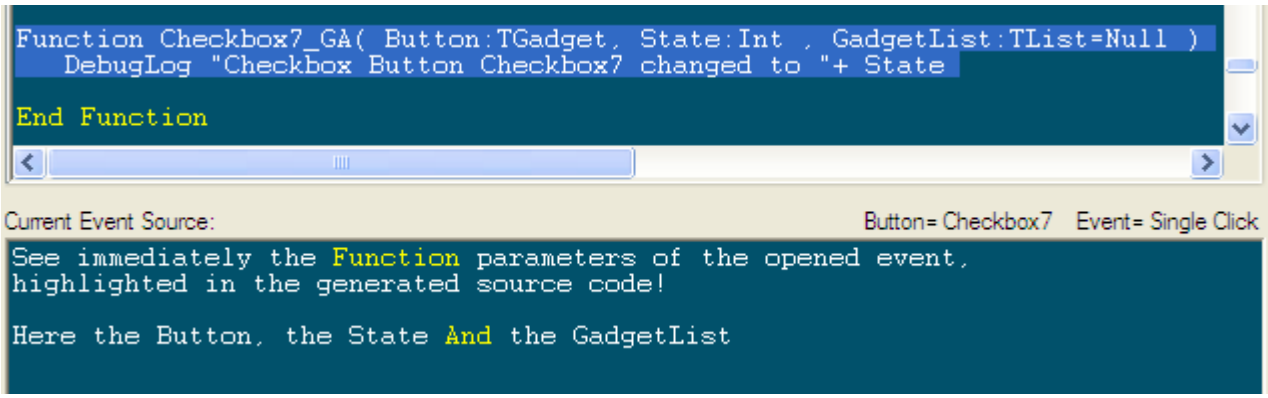

Function Checkbox7_GA(Button:TGadget, State:Int , GadgetList:TList=Null)
DebugLog "Checkbox Button Checkbox7 changed to "+ State
End Function
Current Event Source:
Button= Checkbox7 Event= Single Click
See immediately the Function parameters of the opened event,
highlighted in the generated source code!
Here the Button, the State And the GadgetList

Illustration 248: Event Editor - Function parameter.

While entering data to an event function you may think what kind of parameters are available? The source text is adjusted automatically and highlights the first two lines of the function (must exist) you are working on (if you edit an external file like the Header file, the whole file content will be highlighted in the source code). Unfortunately MaxGui is not aware of the fact that a textarea could be resized on the fly (as i do) and calculates the offset a bit wrong, so the actual position depends a bit of you window size;). But still really useful!

As i know that Logic Gui is a form editor and not an ide you might miss some functions in the Event Editor. While the Event Editor is ok for some lines of code it is may too limited for bigger projects. To overcome this there is a direct interaction with your favorite editor if you want, doesn't matter which one. While in the Event Editor you can call at any time via right click (PopupMenu) or the file Menu your own editor! The text from the event textarea is automatically transfered to your editor and can be edited as needed. When ready, just close your editor and the new (if changed) text will re-appear in Logic Gui. Very simple, very powerful and you can work in your normal environment. I suppose all ide's are able to open more than one file, so i do not only transfer the event text but also the complete source code. In MaxIDE you will get both texts in different tabs and you can easily test the complete code and program your function until ready. To customize this integration you can find an entry in the ini file.

Call your favorite editor!

Logic Gui is waiting for the result.

The complete source (NameOfYourForm.bmx) and your event code is loaded into the external editor. Do your work and close the editor. Logic Gui will automatically be updated, no extra work needed!

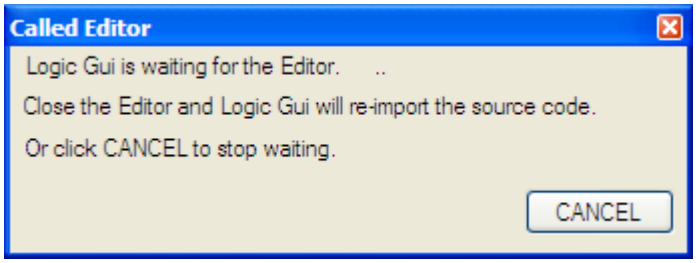

Called Editor
Logic Gui is waiting for the Editor. ..
Close the Editor and Logic Gui will re-import the source code.
Or click CANCEL to stop waiting.
CANCEL

Illustration 249: Event Editor - waiting for external editor.

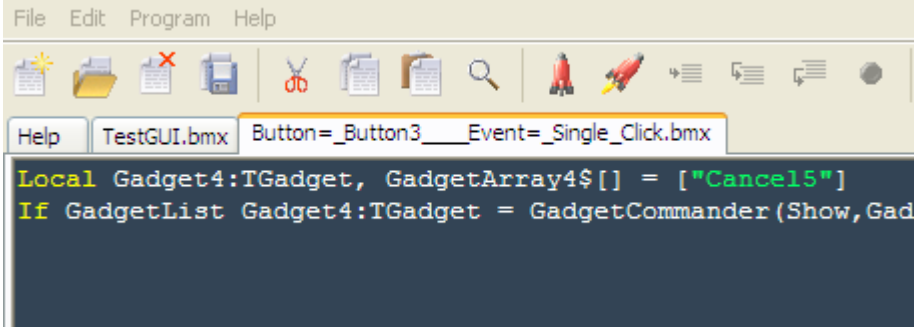


Illustration 250: Event Editor - source transfered to MaxIDE

8.2.5.3 Gadget Commander / Events

The right side of the Event Editor is reserved for the Gadget Commander or the Events treeview. Check out the Gadget Commander in the next Chapter.

The Events tab in the Event Editor is visible when the editor is called directly from the WorkSpace and thus event independent.

The treeview will show all gadgets (sorted by parent) and underneath every gadget the events this gadget can serve and on top also the form files which can be included in the source code.

Note: While you can choose now at different locations the 'grouped by parent' view there is one thing good to know. When using a tabber with several tabs, they are shown as children of the tabber, but you know this does not exist in MaxGui, so they are only there to help you. You can't do anything with them! They visualize the structure of your form only.

A green checkmark indicates an enabled event or a used file. A red cross indicates a disabled event or unused file.

A double click on an event or file shows the stored text in the event textarea at the bottom. If there was any other event open, the current content is stored automatically. The upper source code is scrolled to the function and highlights the first two line to indicate the transferred parameters.

A right click on an event toggles the state from enabled to disabled and vice versa. The source code is updated automatically with the created/deleted function. When you switch on a file, make sure it does exist, or you will get an error message when you try to access the content (double click)!

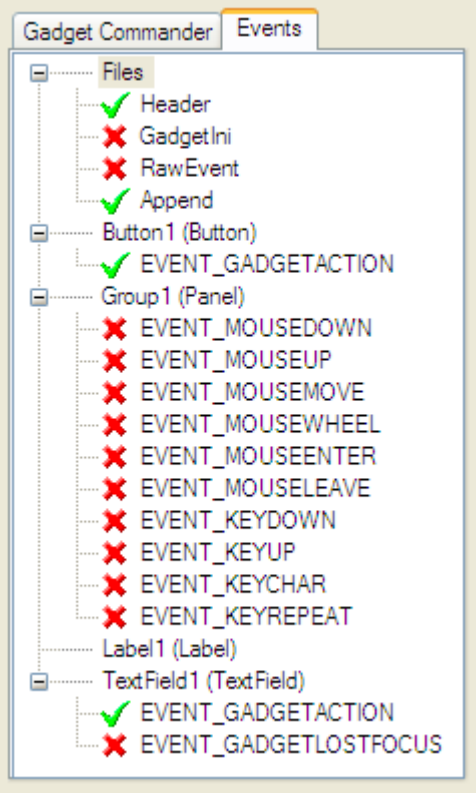


Illustration 251: Edit Events - Events tab.

Open and close the treeview nodes of the 'Events' treeview of the Event Editor also via double click.

8.2.5.4 Cancel, OK, Revert, Apply

If you edit all events (Edit Events opened from WorkSpace) then you can Revert and Apply. For a single event there is OK and Cancel.

***Revert** – Retrieves again what was stored for the event since last save.*

***Apply** – Stores the current event to gadget.*

***Ok** – takes your input and transfers it back to the event tab and stores it into the gadget properties.*

***Cancel** – gives just nothing back and drops all changes made.*

***Note:** Switching between events will automatically store the current content. Going back to the Form Design also stores your last changes, no extra save is needed.*

8.2.5.5 Popup Menu

Right click the Event TextArea to get the popup menu.

***Help** (or F1) – Called once it shows the command syntax of the command the cursor stays on. Called twice the Help tab opens with the full help.*

***Paste** – Paste the text from the clipboard.*

***Indent Code** (or CTRL+}) Indent selected lines.*

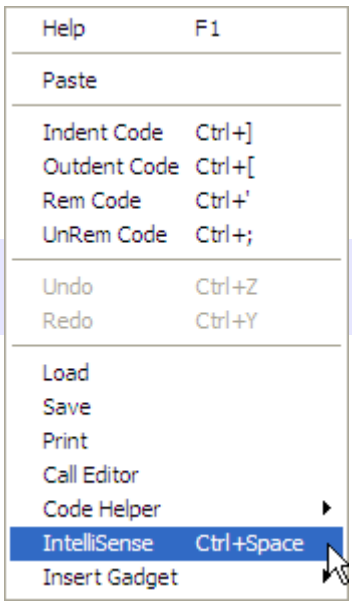


Illustration 252: Event Editor - source text popup menu.

Outdent Code *(or CTRL+{) Outdent selected lines.*

Illustration 253: Indent/Outdent Code of selected lines.

Rem Code *(or CTRL+') Rem selected lines – adds an ' in front of the lines.*

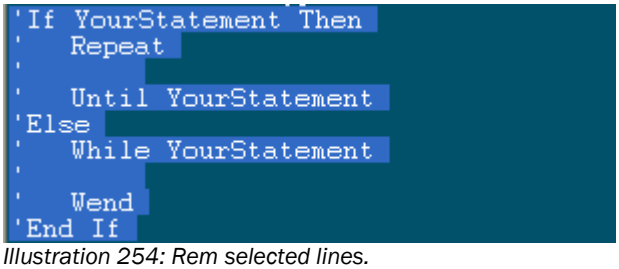


Illustration 254: Rem selected lines.

UnRem Code *(or CTRL+;) Unrem selected lines – subtracts any ' in front of the lines.*

Undo *(or Ctrl+Z) – Undoing the last typing, cut, copy and pasting.*

Redo *(or Ctrl+Y) – Redoing the last typing, cut, copy and paste.*

Load *– Loads a file into the Event TextArea. You can also drop a file onto the TextArea.*

Save *– Saves the current Event Textarea to a file.*

Print *– Prints the Event Text. If you like to have the full source code printed, go to the 'File' menu! Here you are able to choose between 'Print All Source' and 'Print Bottom TextArea'. (prints on the default printer only)*

Call Editor *– Calls your external editor and transfers the current event text.*

Code Helper *– For lazy people there is a "Code Helper" available in the pop up menu of the Event Editor (right click the Event TextArea). The Code Helper can insert all standard programming constructs, like If Then, For Next, Repreat Until... Advantage: it's quicker, automatically indent and you can't type the wrong character.*

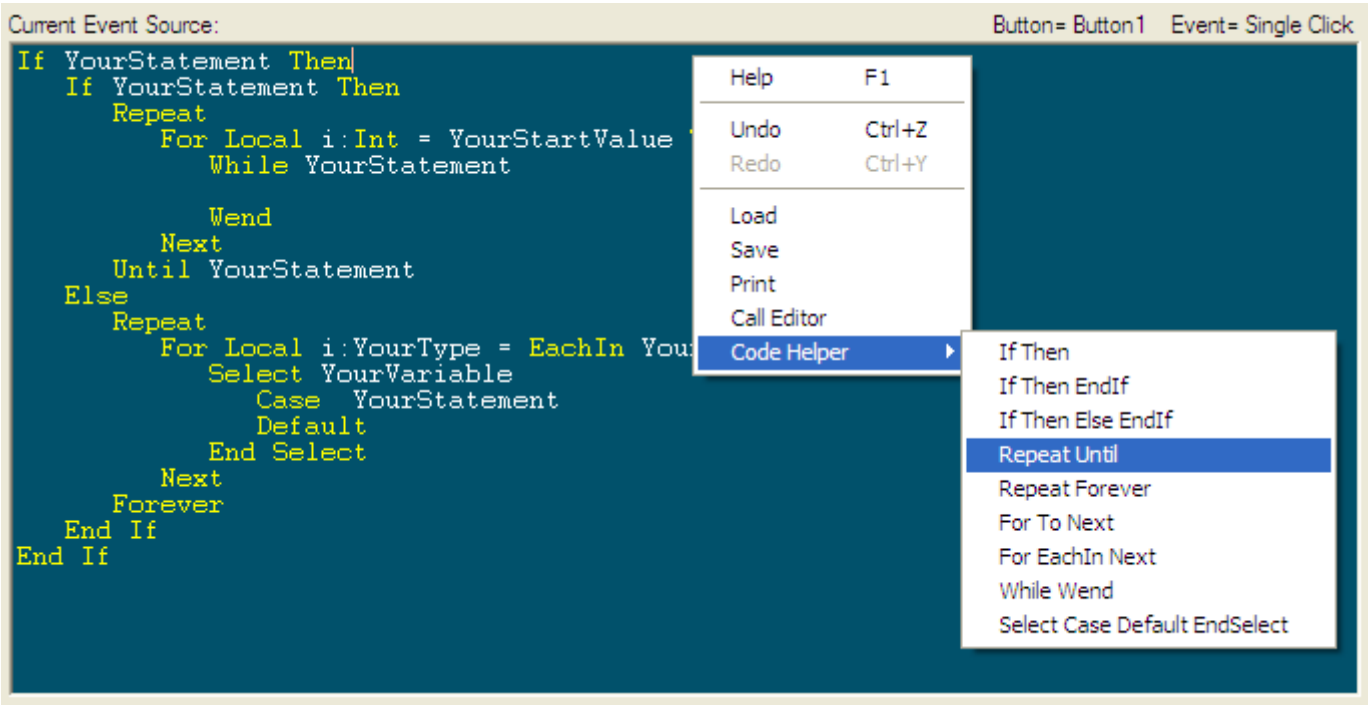


Illustration 255: Event Editor - CodeHelper.

IntelliSense *- Some sort of IntelliSense/help is available in the Logic Gui Event Editor. It is not meant to complete partly entered commands, but to show what commands can be used at all with a certain gadget. Sometimes it's hard to remember what command is available and how it was written when not often used. To start the IntelliSense press CTRL and Space and it will open a ListBox. Choose a topic with the mouse or the arrow keys, hit enter or double click to select, click outside the ListBox or press ESC to cancel the ListBox.*

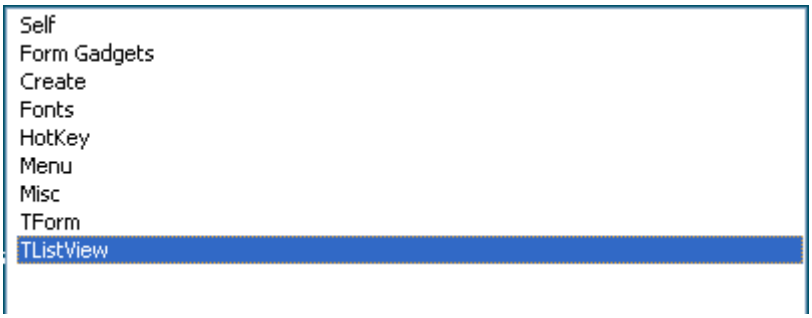


Illustration 256: Event Editor - IntelliSense (Shortcut CTRL+SPACE)

There are several topics. Select the topic 'Form Gadgets' and you will get a list of all available gadgets currently in your form.

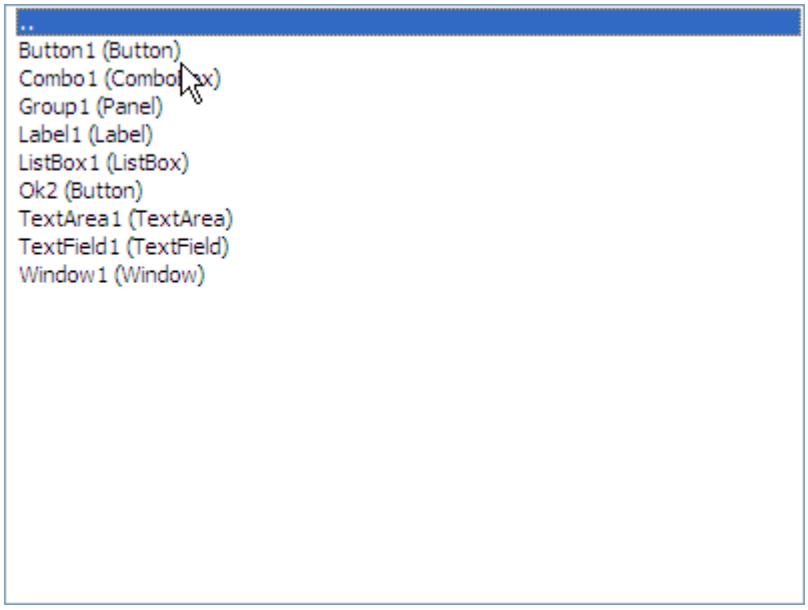


Illustration 257: Event Editor - IntelliSense - List of current gadgets.

Select a certain gadget and a list of commands for that gadget is shown. The tooltip of the command shows a short explanation of the command.

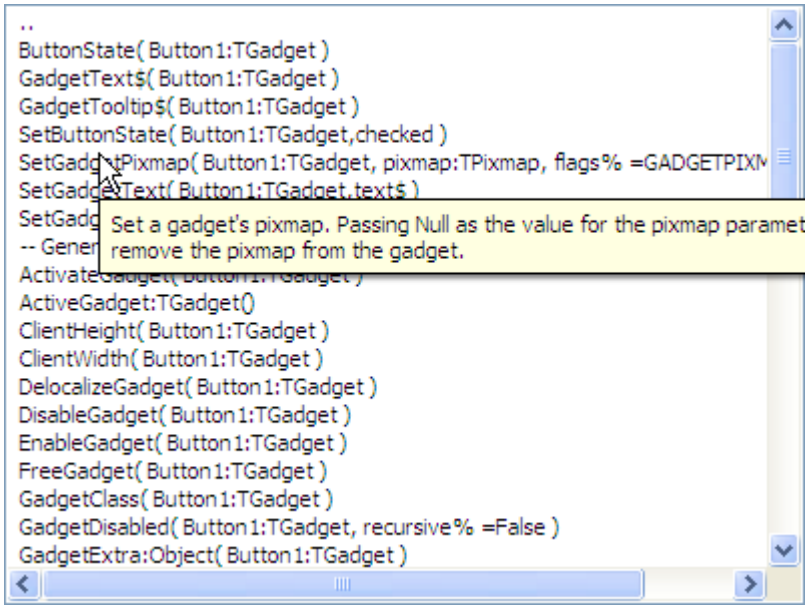


Illustration 258: Event Editor - IntelliSense - List of Commands of selected gadget.

When you choose a command, it will be inserted at the current cursor position. The command is customized for the gadget you have chosen, that means the gadget is already inserted in the command, thus you don't have to type that again.

In the 'Main Menu' of the ListBox appears also an entry 'Self' when you are working inside a Function or Method of a certain gadget. It refers to the current gadget and allows you to access commands specific for this gadget type.

Other topics are 'Menu' for menu commands or 'Fonts' for font related commands and so on... You will find also all TForm methods and functions listed, thus it will be easier to use them, when using independent types.

All the information listed is read from a xml file 'IntelliSense.xml'. This file can easily be edited. Create your

own menus with your favorite commands or change the existing ones...

At the bottom you will find an empty sample for a menu and for a command entry. When adding a menu entry it will appear the next time you open the IntelliSense Listbox (no need to restart Logic Gui).

```
<MenuEntry>
 <Parent>Root</Parent>
 <Name>MyOwnMenu</Name>
 <Tip>Description whatever it does.</Tip>
</MenuEntry>
```

Add this new MenuEntry to the 'ExtraMenu' section at the bottom of the xml file and that's it. You can also add new commands:

```
<MaxGuiCommand>
 <Command>MyOwnCommand</Command>
 <Tip>Description of MyOwnCommand</Tip>
 <Reference>MyOwnMenu</Reference>
</MaxGuiCommand>
```

To have your command get listed under your own menu, the menu needs to be listed in the 'Reference' of the command entry. You can also give more than one reference, just list them all (case sensitive) comma separated.

When you look at some commands in the xml you will see sometimes also a placeholder: [Gadget]. Where this appears the current or the selected gadget will be filled in. In the Reference you will find the gadgetnames the commands belongs to, the keyword 'AnyGadget' means the command can be used with all gadgets (although it does not make always sense).

Insert Gadget *- to insert any gadget name or size, of the current form.*

So, if you need any of those parameters it's now easy to retrieve even without knowing the exact name. Whatever is chosen will be inserted at the current cursor position.

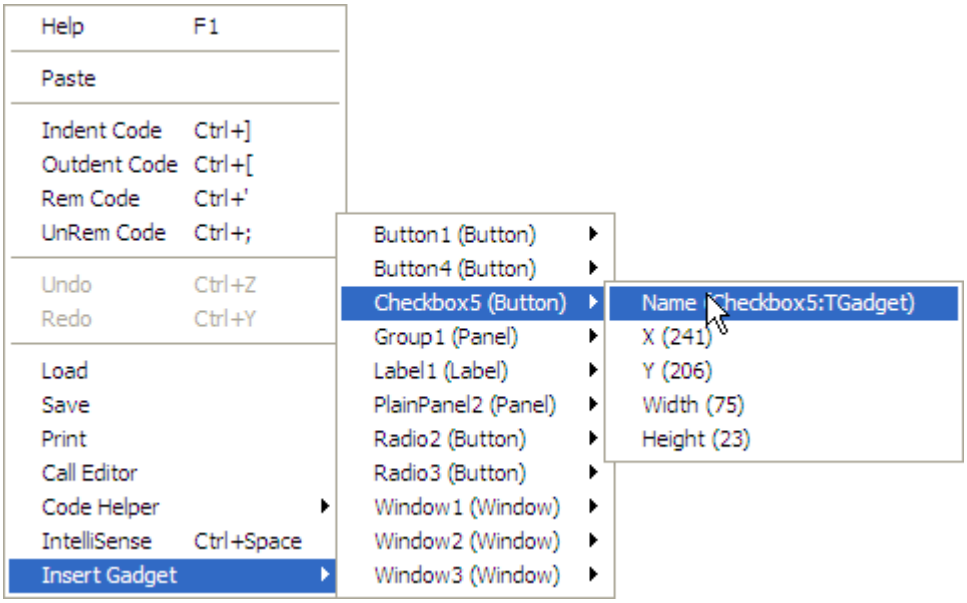
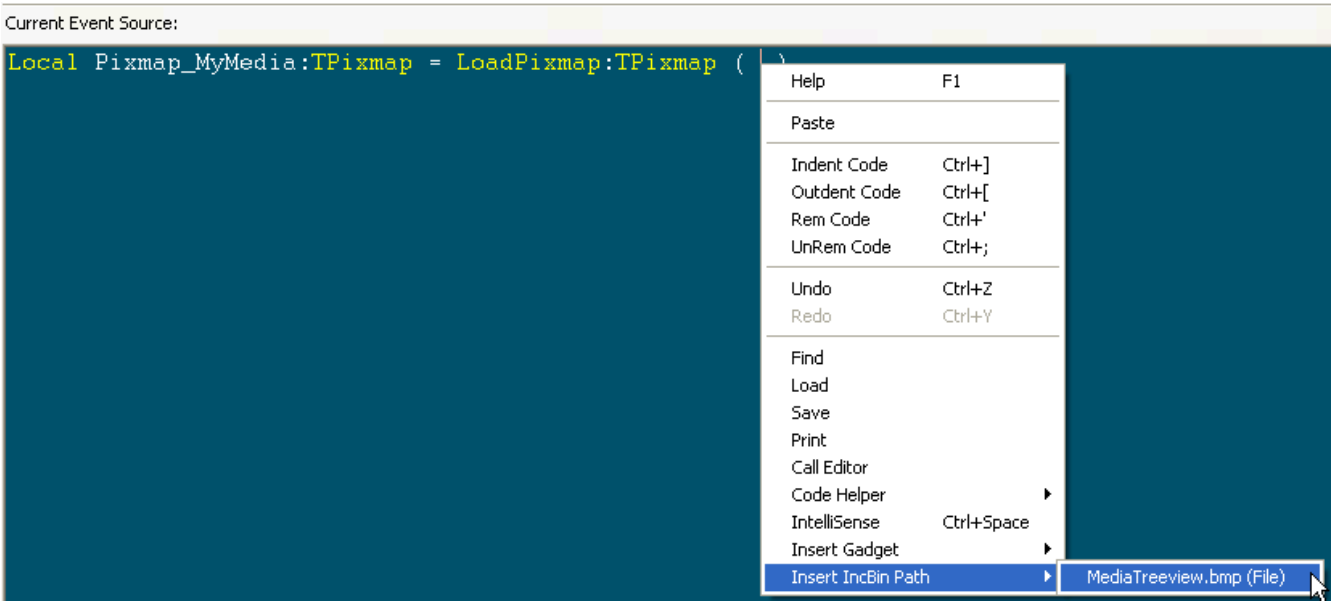


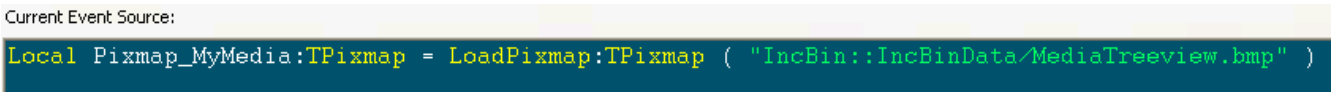
Illustration 259: Insert Gadget - Any of the available parameter can be inserted at the current cursor position.

Insert IncBin Path (from CustomMedia)

See also more info at the Media Manager and CustomMedia support.



The chosen media path will be inserted at the current cursor position.



8.2.6 Gadget Commander

The Gadget Commander is there to run certain commands on a bunch of selected gadgets.

Imagine a window with a lot of gadgets on top which should show up at different times. Normally you either try to group them together as much as possible and show or hide those groups or you have to act on individual gadgets if thats not possible. Instead of writing a lot of commands manually the Gadget Commander can do the work for you just with some clicks.

Everyone is writing code different and thus the usage of global or local variables are different. The default of Logic Gui is to use local variables when creating new gadgets, but of course those variables are not known in the functions called by the events. Logic Gui does create a list of all gadgets when using/enabling the Gadget Commander. This list (when in use) is transferred to every function and you can access any gadget if needed and still keep them local. The usage is turned on automatically when you once used the Gadget Commander, but can be turned on/off manually in the application properties.

When you select several gadgets in the Gadget Commander, Logic Gui will build an local array out of those gadgets. This array is taken as filter against the list of created gadgets and if the gadget exist in the list the chosen action is run. Independently of Logic Gui you can alter the list yourself and add or remove gadgets from it.

To run an action via the Gadget Commander the gadget name as string is used, thus easy to use as human. You can take advantage either from the generated GadgetList (TList with all gadgets) for your own usage or the generated local arrays or both together with the actions you can run.

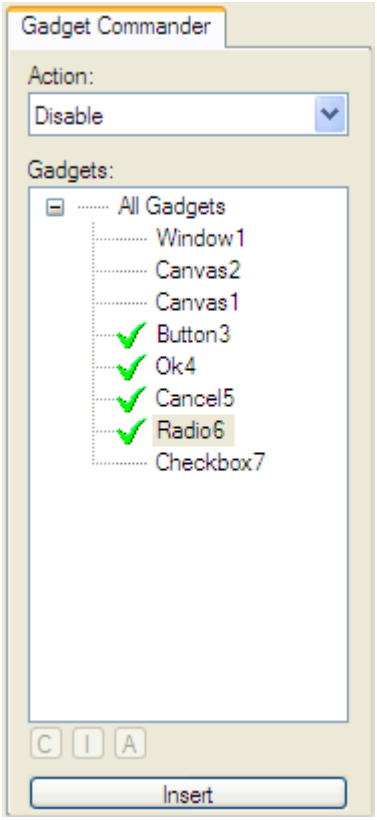


Illustration 260: Gadget Commander Window

8.2.6.1 Action

Choose an action to perform via the combobox and click on those gadget(s) you want the action for. A green checkmark will indicate your current selection. When ready hit on insert and the relevant code will be put into the Event Source textarea. You can edit it now or afterwards if needed. Once you use the Gadget Commander it will switch on it's usage for the source code creation (if not yet turned on), that means a TList of all Gadgets are created and given to the functions.

Please keep in mind that any code inserted is not updated anymore because it resides in the "user" area. The Gadget Commander allows you very easy to access a lot of Gadgets at once and you can edit it even outside of Logic Gui. All Gadgets will be put in a TList and their names are stored in the context of their own TGadget. You don't need a handle but only the gadget name to perform an action.

***Note:** MaxGui uses the TGadget context for the textfilter, thus those gadgets can not be used for both functions (Textfilter and GadgetList) and you have to decide what you need or want.*

Underneath the gadget treeview there are three disabled buttons C-I-A. They are not yet implemented and stand for (C)lear, (I)nvert and (A)ll to alter the selection.

When we look at the available actions, they are all MaxGui related except GetGadgetHandle and RemoveFromList. That means the MaxGui command, for instance DisableGadget(), is there as "Disable" and means that all selected gadgets should be disabled.

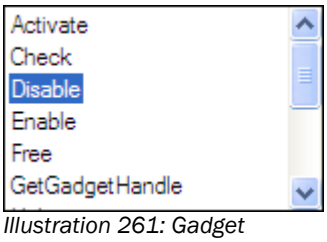


Illustration 261: Gadget Commander - Actions 1

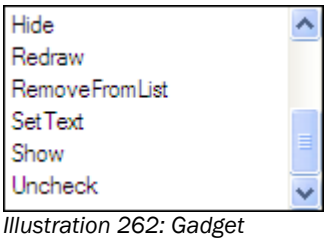


Illustration 262: Gadget Commander - Actions 2

Note: Activate = ActivateGadget(TGadget), Check = SetButtonState(TGadget , True), Disable = DisableGadget(TGadget), Enable = EnableGadget(TGadget), Free = FreeGadget(TGadget), Hide = HideGadget(TGadget), Redraw = RedrawGadget(TGadget), SetText = SetGadgetText(TGadget,Text$), Show = ShowGadget(TGadget), Uncheck = SetButtonState(TGadget , False).

The GetGadgetHandle action will retrieve the TGadget handle for a certain gadget from the GadgetList. That means that the Gadget Commander returns a value. If you don't ask for a handle all other actions will return NULL. With this new action command you have a simple way to access the gadget although you only know the name.

The RemoveFromList command removes the selected gadgets from the TList.

8.2.6.2 Examples

As mentioned before every insert from the Gadget Commander create a local gadget array, this can be seen here in the first line – GadgetArray1$[]. All your selected gadgets are member of this array. Every member is just written as gadget name$, thus you can change, add or remove anything you like also without Logic Gui or Gadget Commander later from your favorite editor.

The Gadget1 variable is only defined if you need the result of the Gadget Commander.

For both, Gadget1 and GadgetArray1$[], the Gadget Commander is using a counter which is increased on every insert.

1) *Local Gadget1:TGadget, GadgetArray1$[] = ["Button3","Ok4","Cancel5","Radio6"]*
2) *If GadgetList Gadget1:TGadget = GadgetCommander(Disable,GadgetArray1,GadgetList:TList)*

When the GadgetList exist, the command 'Disable' will be processed for all gadgets in the array, if they also exists in the list. Normally the GadgetList is available once you inserted some code from the Gadget Commander, but you could have disabled it later in the application properties, without removing the code it uses.

1) *Local Gadget2:TGadget, GadgetArray2$[] = ["Window1"]*
2) *If GadgetList Gadget2:TGadget = GadgetCommander(GetGadgetHandle,GadgetArray2,GadgetList:TList)*

If you want to directly access the Window1 use the GetGadgetHandle, here stored in the local variable Gadget2, for instance to set the gadget shape or so. Of course you could also make the window1 a global variable and access it directly in your function, this here is only a different approach to keep things local, just use what fits your needs.

1) *Local Gadget3:TGadget, GadgetArray3$[] = ["Canvas1","Checkbox7"]*
2) *If GadgetList Gadget3:TGadget = GadgetCommander(RemoveFromList,GadgetArray3,GadgetList:TList)*

If you like to work with the GadgetList, but there are some gadgets which should not be member of it anymore, you can use also the Gadget Commander with the RemoveFromList command to remove those gadgets.

For instance: While using the GadgetList of the Gadget Commander to set or change data via the LogicXML commands, you may decide not to change all of the gadgets. So, to remove easily a bunch of gadgets from

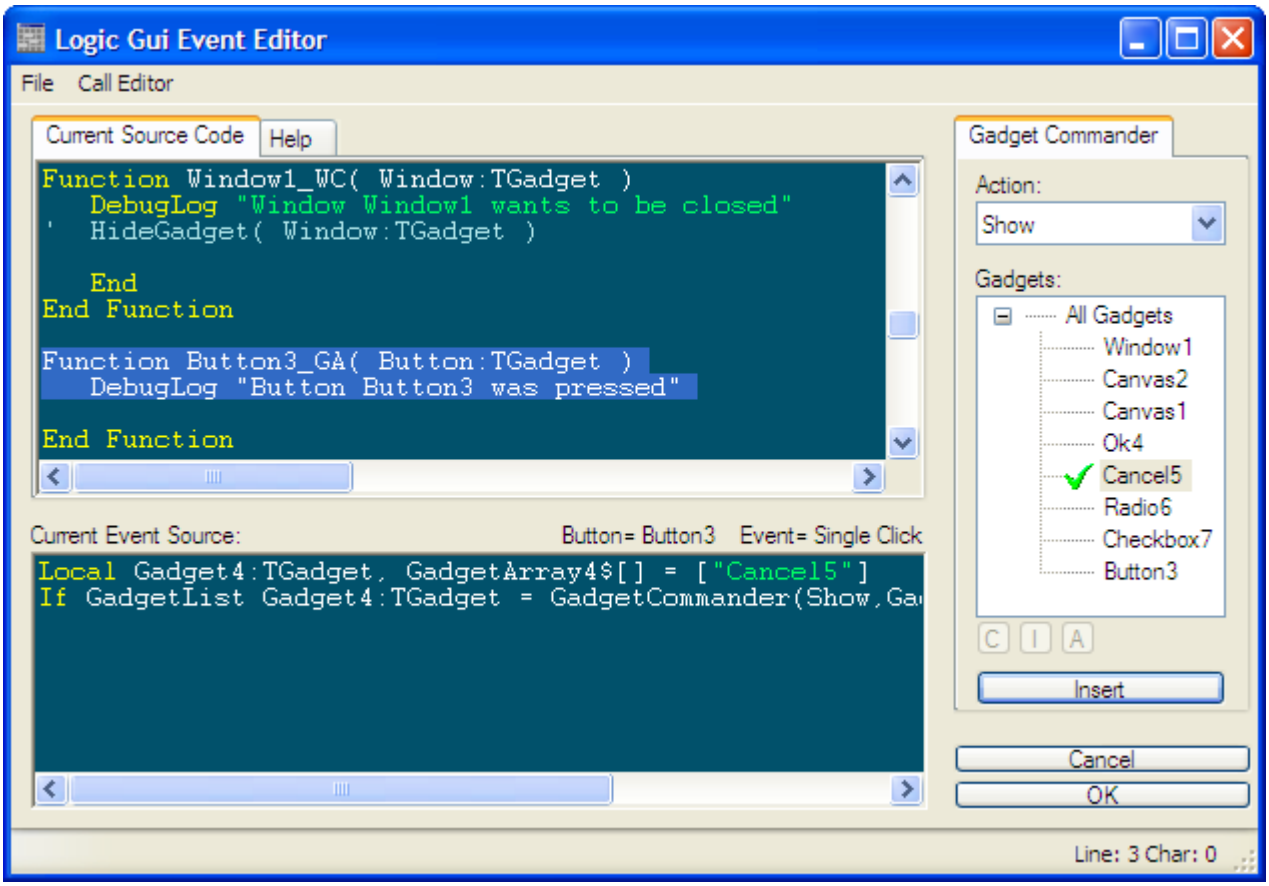


Illustration 263: Gadget Commander - insert code into Event Source.

the list you can use the Gadget Commander. The action command 'RemoveFromList' can be used to do the job. Make a copy of the old complete list if you need. All chosen gadgets are removed and do nothing when data is retrieved from the xml file, quite good for TextFields where the text entered should stay intact.

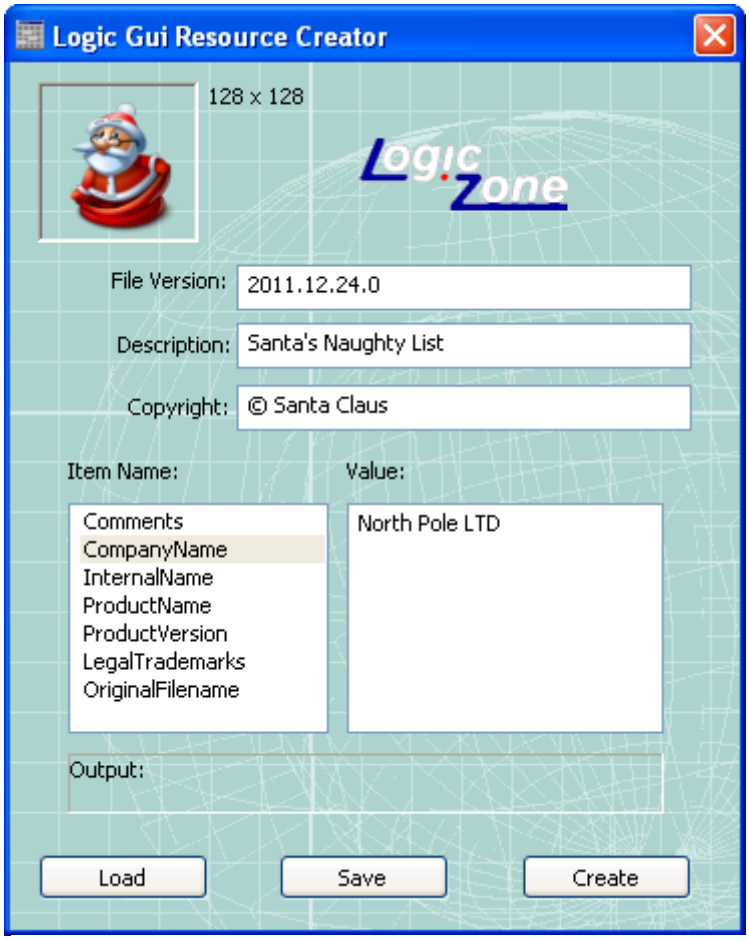
9. Appendix

9.1 Logic Gui Resource Creator

It simplifies the creation of application resource files. Combine icon, manifest and windows resource files with a click. Add your own meta data like version, copyright, company info and such.

The Logic Gui Resource Creator comes with a descriptive manual and example and works standalone. Create different sets for all of your applications and update them easily on demand. As this does not need any special Logic Gui version this tool can be useful for all user.

Login and download from the registered user area.



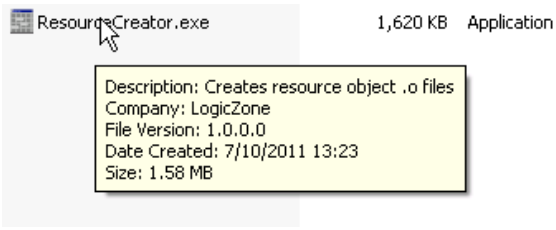


Illustration 265: Get meta data info when hovering the mouse over the application file.

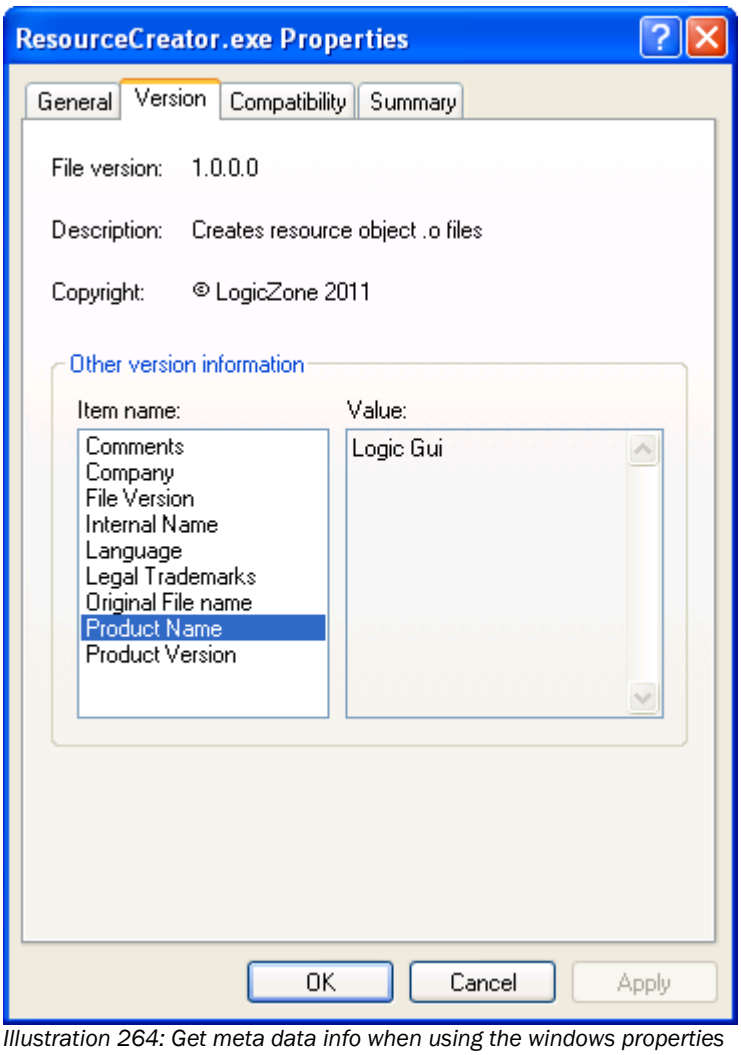


Illustration 264: Get meta data info when using the windows properties dialog.

9.2 IconStrip Editor

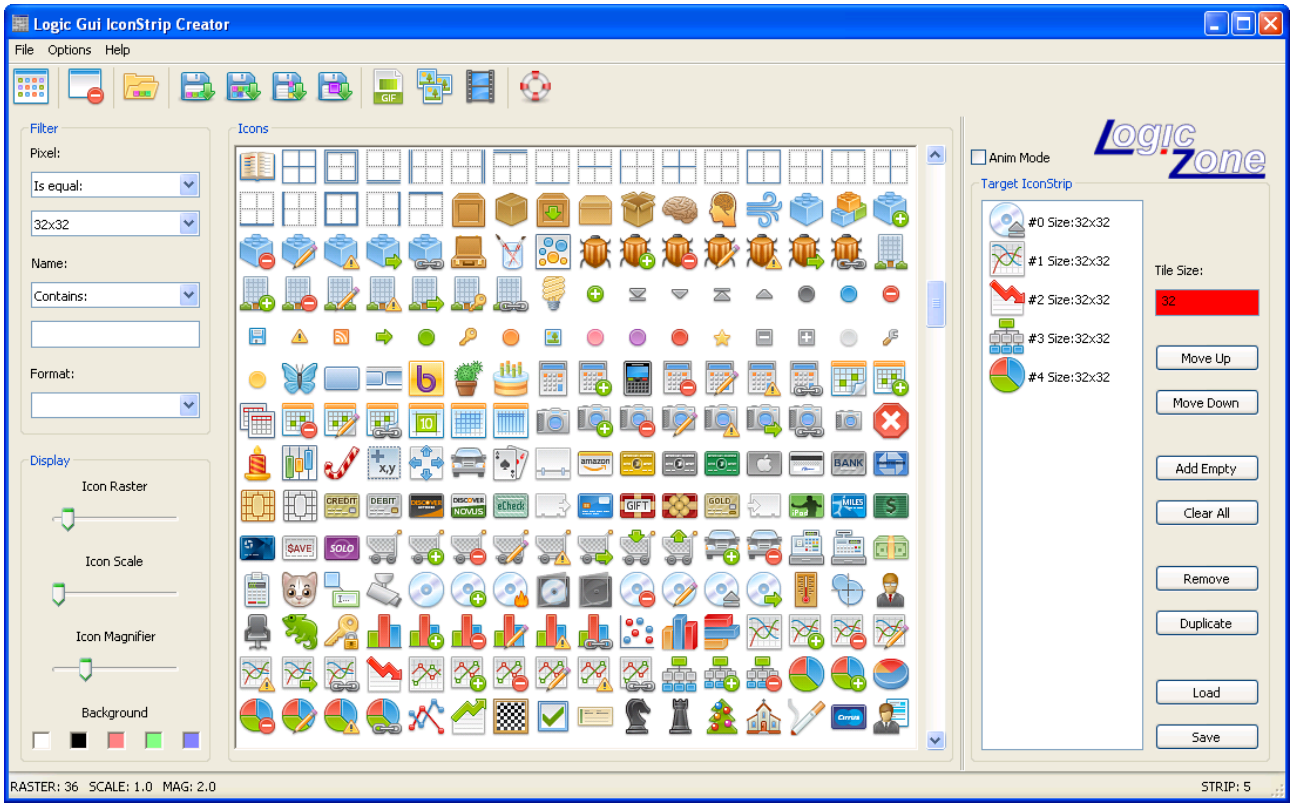


Illustration 266: IconStrip Editor - Main Window

The Logic Gui IconStrip Creator is meant as an easy to use tool to quickly assemble an IconStrip.

But not only IconStrips for Gadgets can be created, also AnimStrips and SmartButton-Strips.

Animations can immediately viewed in an animation window with your settings.

You will also be able to convert GIF animations into Animstrips with a single click. Knowing that there are thousands of GIF animations available for free, you will probably able to find something useful.

Extract a certain icon size from an Icon .ico file to use in your application.

An IconStrip can be used for several MaxGUI Gadgets, for example:

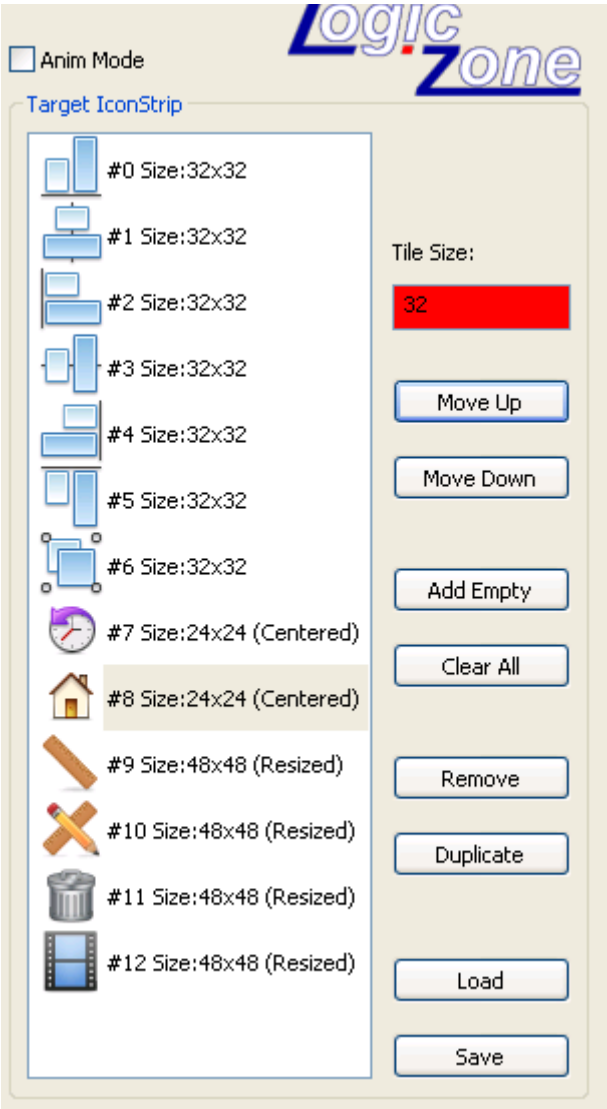
1. Toolbars for window gadgets

2. Icons for menus

3. ListBox, TreeView, Tabber, ComboBox as GadgetItems

AnimStrips normally used in your programs for animations.

SmartButton-Strips are used together with the SmartButton module from Logic Gui. Make your own GUI-Buttons with the great concept of this module using regions, triggers and actions.



Open several animation windows to check your animstrip with different settings in parallel.

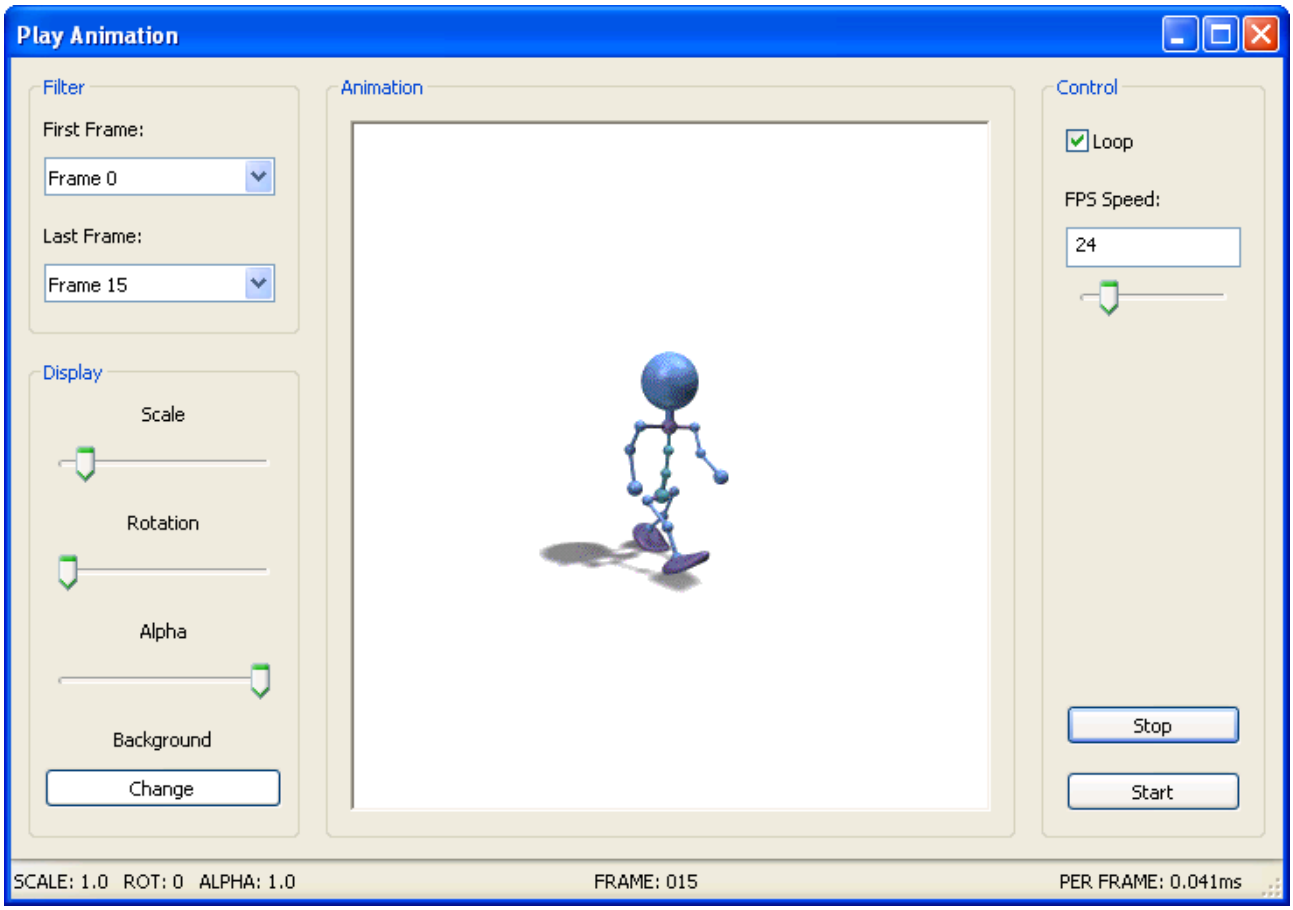


Illustration 267: IconStrip Editor - Animation window

The IconStrip Editor comes with a separate user manual. Check it out for all available options.

The IconStrip Editor is a standalone application and can used with any Logic Gui version.

9.3 Modules

9.3.1 LogicXML Module

For maximum flexibility from inside and outside of Logic Gui to access xml files, you can use the LogicXML mod. You need to install this mod if you like to work with xml files as input to your gui. Several commands for the multi language support, to make life even easier. Different types and functions to access xml data as input for your gui (3 types, 28 commands). The module comes pre-compiled for windows and needs only be moved to the BlitzMax/mod/pub.mod folder.

To have the commands from LogicXML highlighted and the help working, run docmods from BlitzMax/bin/docmods.exe ! Other platforms may work when running 'Build Modules'. For further information check out the help of the module from within the IDE.

***Note:** Logic Gui makes usage of the LogicXML module when needed (for instance if multi language or xml is selected) and inserts all relevant commands automatically. Only for certain customization you have to add commands yourself, but even then special comfort functions will help you.*

***LogicXML** uses MaXML © by John Judnich as XML file parser.*

It can be found here:

http://www.alsbonsai.com/john/MaXML_v2.22.zip (229kb)

Install MaXML the same way then LogicXML!

Example:

LogicXML has a function 'SetWindowMenu' which enables you to set a complete menu structure to a window. Enter the window name and the menu to load, that's all. LogiXML will create the menu structure in MaxGui for you. This allows you to move a menu item to everywhere in your menu tree without recompiling the source. Other useful actions could be: Change the text to reflect a different meaning. Change the tag to call another function during an event! Change the 'checked' or 'disabled' state. Change or add a HotKey...

Function SetWindowMenu(Window:TGadget , Menu:String , WindowName:String=Null , GadgetList:TList=Null)	
Description	This is a convenient function to add a complete menu/popupmenu to a gadget.
Information	The specified menu and it's structure is read in from the xml file and added to the chosen gadget. If you declare a GadgetList , all single menu items are added to the list for later reference. Example: SetWindowMenu(Window:TGadget , "MenuName" , "Window1" , GadgetList:TList) When using the xml file from Logic Gui , the 'MenuName' is the same as used in the Menu Control Center. The WindowName is used to build the correct context of the menu gadget to access it aftwerwards (e.g. switch language) and to calculate the correct offset of the MaxGui menu tag. This is important to call the right event.

Checkout out all commands in the module itself and use the demo video and example (download able in the user area) to get familiar.

9.3.2 SmartButton Module

9.3.2.1 What is a SmartButton

A SmartButton is an image button based on a panel used in MaxGui and uses a BlitzMax module.

9.3.2.2 What is so smart about it

While a panel can only serve events in it's rectangular shape, the SmartButton is far more flexible. The user can define ***one or more*** *hotspot regions where the SmartButton should generate events.*

9.3.2.3 What is a SmartButton hotspot region

Hotspot regions can be consist out of rectangles, circles, lines, ovals and polygons (any shape)! That means, you don't need a panel for every event you want to catch, simply define more than one region. Every hotspot region produces an event when a region is entered (hover), left mouse button up and down, right mouse button up and down, mouse wheel up and down and you can run your own coded routines. Having said that, you don't have to! As the SmartButtons supporting also certain actions. Additional you can use a timertick with interval as trigger and special regions allows you to customize your SmartButton further:

Enter SmartButton	*all actions in this region are run when the SmartButton itself is entered.*
	Useful when the SmartButton rectangle is suffice as hotspot.
Leave SmartButton	*all actions in this region are run when the SmartButton is left.*
	Good to use to reset your graphics/SmartButton.

SmartButton creation	*all actions are run directly after the SmartButton is created.*
	Perfect when you need to initialize something or to start a timer.
SmartButton Timer	*all actions which should run at certain intervals.*
	Run actions at different times without the need of a manually trigger.

9.3.2.4 What is a SmartButton action

An Action can be SetPicture, PlaySound, Simple Animation...

Every region can hold ***one or more*** *actions. The trigger decides when to act. These actions once created are completely independent. They will run every time the event is fired. All SmartButton actions and events are hook based and will occur without delay.*

9.3.2.5 How to install the SmartButton module

Unzip the SmartButton archive and put it in your BlitzMax mod folder. The structure should look at the end like this: ..\BlitzMax\mod\logiczone.mod\smartbuttons.mod\..

Run ..\BlitzMax\bin\docmods.exe to update your BlitzMax documentation (simply double click). After that the new commands from the SmartButton module are highlighted and the F1 help is available on your system. The documentation can be found under 'Third Party Modules' in the Help section of the IDE. Logic Gui imports the module automatically when at least one SmartButton is in use.

9.3.2.6 Definition of a SmartButton

To hold all the information needed for a SmartButton a xml config file is used. You can find all created regions and defined actions with all paths to external media files in here. If you feed the SmartButton module only by your own code, this xml config file is not needed at all. But when you want to use this SmartButton in Logic Gui, this is the way to store the information. While it is not easy to build such a xml config file manually a SmartButton Editor will do it for you automatically.

9.3.2.7 The SmartButton Editor

This editor let's you create visual the needed hotspot regions.

Adds actions to your regions.

Is able to store or load a SmartButton config file (.smb).*

Note: *Checkout the SmartButton documentation for more information on how the SmartButton and Editor works.*

9.4 Shortcuts

WorkSpace shortcuts work only when the WorkSpace is active.

CTRL S	*When the workspace is active CTRL S saves your form to the latest chosen filename.*
CTRL A	*Save form as...*
CTRL X	*Cut selected gadgets*
CTRL C	*Copy selected gadgets and paste them immediately*
CTRL V	*Paste gadgets which were cut* *Paste images from the clipboard to the WorkSpace or to gadgets*
Delete	*Delete selected gadgets*

Backspace	Delete selected gadgets
CTRL N	Start with a new form
CTRL O	Open a new form
CTRL P	Print the form This will print your workspace on the default printer via paint (needs to be installed) in the background.
ESC	Deselect all gadgets, returns back to size and move mode
CTRL G	Group selection together
CTRL U	Ungroup selection
CTRL L	Lock selection (it locks both, sizing and moving)
CTRL Shift L	Unlock selection
CTRL F	Bring primary gadget (blue frame) to front
CTRL B	Bring primary gadget to back
CTRL Y	Redo
CTRL Z	Undo
CTRL PageUp	Select parent of primary gadget This is especially useful when there are several panels on top of each other and you can't easy pick one in the background. Now you can select just one child on top and go backwards with every 'Select Parent'. That should be much faster than searching the parent in the Source Properties Editor. The Gadget Control Center is automatically updated and ready to change the values of the selected parent.
CTRL PageDown	Select all children of container gadget This is useful if the space to click on the container gadget is too small.
Space	Toggle between design and preview mode
Tab	Switch to next tab of the last selected tabber Logic Gui remembers the last selected Tabber you don't need to select it again.
CTRL PrintScreen	Create screenshot as a file with date and time, in the folder of the form File name will be 'Date+Time+ScreenShot.png'.
Shift click a gadget	Add or subtracts the gadget from the multi selection
CTRL click container	Select container gadget without children
Shift + move gadget	Move selecteds gadget only horizontal
CTRL + move gadget	Move selected gadgets only vertical
Arrow keys	Move selected gadgets one pixel
Shift + Arrow keys	Move a “big step”. This can be either 5 pixel or if enabled the grid spacing (View menu/Step in Gridsize)
CTRL + Arrow keys	Grow the selected gadgets in that direction by one pixel
CTRL Shift + Arrow keys	Grow the selected gadgets in that direction by one “big step”
ALT + Arrow keys	Shrink the selected gadgets in that direction by one pixel
ALT Shift + Arrow keys	Shrink the selected gadgets in that direction by one “big step”
ALT Click on ScrollPanel	Set ScrollPanel maximum size without slider
CTRL + drag WorkSpace window	Move WorkSpace and all tool windows together

ALT F4	Close Logic Gui
F5	Compile and test the form (like clicking on the run icon)
CTRL T	Toggle all tool windows on/off which covering the WorkSpace
F1	Calls syntax help in Event Editor
CTRL + Click on Guide	Select all snapped gadgets and their children in one go
ALT + Click on Guide	Switch Guide between horizontal and vertical style and vice versa
F4	Open the Properties Editor
+	Grow gadget in all directions 1 Pixel
-	Shrink gadget in all directions 1 Pixel
Shift +	Grow gadget horizontally (left and right) 1 Pixel
CTRL +	Grow gadget vertically (top and bottom) 1 Pixel
Shift -	Shrink gadget horizontally (left and right) 1 Pixel
CTRL -	Shrink gadget vertically (top and bottom) 1 Pixel
F6	Opens the parent folder where the form exists in an explorer
CTRL+I	To insert the last inserted gadget again
CTRL+D	To duplicate height and width (Primary needs to be selected)
CTRL+W	Swap Gadgets (Primary needs to be selected)
CTRL+M	Switch to measure mode

Note: Shortcuts are also supported right Shift / Control / Alt for lefties.

9.5 Automatic Save

If not changed from the default setting, Logic Gui saves your form in regular intervals. You can customize the saving in the ini file. To be even more secure, Logic Gui creates backups of your form when opened. There will be up to three additional files, .old, .older, .oldest. The first time you open up a form, the original will be copied and .old appended. The second time you open up the form .old will become .older, the original will be copied again to .old and so on... Those files will give you a backup of the three latest sessions with Logic Gui on that form and thus you can go back even if the undo can't help anymore.

Note: When automatic save is enabled, saving is skipped if Logic Gui is minimized!

9.6 Drag & Drop

9.6.1 WorkSpace

FormName.LG	Logic Gui form file	Loads the form or adds it to an existing one.
FormName.png	Screenshot of the form file	Loads the form.
Name.ELG	Exported Logic Gui form file	Unpacks the export archive and loads the form.
Name.MLG	Logic Gui menu file	Opens the Menu Control Center and loads the file.
Name.TLG	Logic Gui toolbar set	Opens the toolbar properties and loads the setting to the WorkSpace window.
Name.bmx	BlitzMax code file	Opens the BlitzMax/MaxGui code parser and loads the file.
IconName.ico	Windows Icon file	Opens a requester which reminds you to use the external Logic Gui Resource Creator program to

		generate your application icon resource files.

Note: Drag and Drop of Logic Gui Form Files will start the program and load the form. If you drop more than one form file all additional forms will be loaded as if you do it via OPEN/INSERT.

9.6.2 Event Editor

Name.txt	Textfile	Replaces the text in the lower textarea.
Name.bmx	BlitzMax code file	Replaces the text in the lower textarea.

9.6.3 Form Gadgets

Drop files from the explorer directly onto gadgets inside the form.

Panel support drop of images.

Buttons support drop of images.

TextAreas support drop of files to load.

Windows support drop of icon image (Pixmap) and .mlg (Logic Gui saved menu files) menu files. Please keep in mind that you can undo gadget changes, nothing else and when you drop a menu on a window that can be undone as well, but the menu will stay in the list of available menus in the form.

9.7 Customizing the ini file

The ini file (defaults.xml) is there to load all defaults as system startup and store your personal settings. Logic Gui does all this on it's own and you don't have to touch this file at all, if you don't like. Nevertheless there are may some good reasons why you wanted to edit some settings and in that case it's better to know what you will find.

The ini file is a normal xml file and can be opened with any text editor. I recommend to make a backup before altering the file, just in case.

Note: Shut down Logic Gui first, or your changes will be overwritten by a temporarily used file.

A XML data structure is a "tree" of items (called "<nodes>"). Each node can contain data, such as a name, value, and an unlimited number of attributes.

9.7.1 Gadgets

Let's have a look at the textfield entry in the ini file for instance and what we do find there.

```
<STANDARD_TEXTFIELD Default_Text="TextField" Design_Range="10" height="18" width="80" EVENT_GADGETACTION="1" EVENT_GADGETACTION_TEXT="" EVENT_GADGETLOSTFOCUS="0" EVENT_GADGETLOSTFOCUS_TEXT=""/>
```

STANDARD_TEXTFIELD

The node Logic Gui looks at when the textfield should be added to the form.

Default_Text

An attribute which describes the text which appears as default variable name and default text.

Design_Range="10" height="18" width="80"

Default size in pixel.

EVENT_GADGETACTION="1"

Event GadgetAction is “1” turned on automatically when this gadget is added.

EVENT_GADGETACTION_TEXT=""

No default text is added to the event function and thus added for every such event.

EVENT_GADGETLOSTFOCUS="0"

Event GadgetLostFocus is "0" switched off by default when this gadget is added to the form. Turn the 0 (zero) to 1 (one) to switch the event on.

EVENT_GADGETLOSTFOCUS_TEXT=""

No default text is added to the event function and thus added for every such event.

9.7.2 Call External Editor

To customize the integration of your external editor you can find an entry in the ini file <Edit_Event ImExport_Path="C:\" Event_Text="" Use_Source_Text="1" /> The ImExport_Path sets the path where the data is given to the editor and taken back to Logic Gui, Event_Text - if you enter a name here, it will always used as filename, when empty Logic Gui will use a combined string out of gadget name and event type, Use_Source_Text - if set to 1 (default) the full source code is also transfered, 0 means only the event text to the editor! If your editor only allows to open one file at a time set Use_Source_Text to "0".

9.7.3 Snap to Grid

When working with the snap to grid function you may like to have another threshold where the gadget snaps to the grid. You can do so at:

```
<Snap SnapToGrid="0" Threshold="4"/>
```

The threshold is set in pixel.

9.7.4 Use WorkSpace

Every time you start via "New" a form, some settings will reset or load from the ini file. One of those settings is the existence of the WorkSpace window during the test compile.

```
<SourceCode Indent="&#9;" ReferenzTab="&#9;" Use_WorkSpace="1"/>
```

Find the Use_WorkSpace and set it to "0" if you don't want that window by default.

9.7.5 BlitzMax compiler path

Run starts the Blitzmax compiler and shows quickly your form. Blitzmax is expected at the default path. If not found you will be asked to enter the path to the compiler. If you like to have any special setup of compiler or editor you can edit the below setting.

When Logic Gui saves the form as bmx file to compile it or to transfer it to an editor the default name 'TestGui' was taken (if not changed in the ini file). It is also possible to delete the name from the inifile, Logic Gui will then take the form name as bmx file and as exe file. Thus you have three choices:

1.You could give an absolute path and all files will be written there with the specified name, this is good for automation (e.g. hotfolder).

2.Only a specific name would always write the file relative to the form with that name.

3.Third option is to have the form name as bmx file name. Example entry from the ini file:<Test_Gui InputFileName="" OutputFileName="" BMax_Path="" Console="1" Editor=""/>

```
<Test_Gui InputFileName="TestGUI.bmx" OutputFileName="TestGUI" BMax_Path="C:\Program Files\BlitzMax.130\bin\bmk.exe" Console="1" Editor="C:\Program Files\BlitzMax.130\MaxIDE.exe"/>
```

If you once setup the path (and it's working) and you want to try out another blitzmax version/release, you can choose to edit this entry or recall the path setup via the File/Build Options/ Set Bmax Version entry.

9.7.6 Automatic Save

Automatic Save is done when enabled. The Intervall can be set to any value in seconds bigger then 60 (1 Minute).

Automatic save on exit, when there are changes to the form. Default is set to on. You can change this behavior. In the save entry look for "On_Exit" 1=On 0=Off.

```
<Save>
  <AutomaticSave Active="1" Intervall_In_Seconds="600"/>
  <On_Exit>1</On_Exit>
  <LoadLastFormOnStart>1</LoadLastFormOnStart>
  <LastForm>C:\Documents and Settings\ItsMe\Desktop\Dialogue.LG</LastForm>
  <RecentForms/>
  <SaveAPreviewWithForm>1</SaveAPreviewWithForm>
</Save>
```

9.7.7 Load last form on start

LoadLastFormOnStart - when set to "1" it will just load the last used form (default), otherwise Logic Gui starts with a blank new form.

```
<LoadLastFormOnStart>1</LoadLastFormOnStart>
```

9.7.8 Form Previews

If you do a save-all, a complete screenshot is taken and when you do a save-selected, only the selected area is used. These screenshots are saved with the form.

If you don't like extra previews, you can switch them off by changing the

```
<SaveAPreviewWithForm>1</SaveAPreviewWithForm>
```

value to 0.

Window2.LG

Window2.png

9.7.9 GadgetCommander

The GadgetCommander has an entry in the ini file, where you can set the general behavior (on/off - default is off). This is read in when you start Logic Gui and every time you choose 'New', but overwritten from a form loaded.

```
<Use_GadgetCommander>0</Use_GadgetCommander>
```

9.7.10 Edit All Events

When switching the WorkSpace tabber to 'Edit Events', this maximizes the window that you can work with a full grown window, which gives a better overview. Set the AutoMaximizeWindow to “0” if you don't like that option.

```
<Edit_AllEvents AutoMaximizeWindow="1" BiggestLogicGuiProportions="0"/>
```

9.7.11 Highlighting

The path for the commands.txt used by the keyword highlight is available in the ini file. This was needed as the new BMax 1.26 version changed the path. Thus you can customize if you use the old or the new BMax version and have the highlight working. The path you have to enter is the relative path from the BlitMax folder.

For the old Version (up to 1.24) set CommandsTextPath="doc/bmxmods/commands.txt", for newer Versions than 1.26 set CommandsTextPath="docs/html/Modules/commands.txt"

You can choose your favorite font and size. The default will be Courier in 10 points.

Put the three rgb values as a hex string, if you want to change it to your own colors ($FF8800 -> FF-red, 88-green, 00-blue (search for 'HighLight')). Additional you can choose if the keywords should be 'capitalized' when you write them in small letters. The highlight function can be switched on or off via the 'Active' attribute of the highlight node. As i use the standard commands.txt from blitzmax (keyword reference) also your personal implemented modules are recognized and highlighted.

```
<HighLight Active="1" BackgroundColor="$01516B" TextColor="$ffffff" CommentColor="$b1e7eb" QuotedColor="$ff66" KeywordColor="$ffff00" Capitals="1" Font="Courier" FontSize="10" CommandsTextPath="docs/html/Modules/commands.txt"/>
```

9.7.12 Tab indent of source code

*The tab indent of the sorce code can be customized, for instance to two spaces to save some space. An extra line will be added automatically with the default value "~t" a tab (xml syntax -> "	"). The indent value will be read in during startup from line:*

```
<SourceCode Indent="&amp;#9;" ReferenzTab="&amp;#9;" Use_WorkSpace="1"/>
```

Change it to whatever is useful for you. The ReferenzTab is just there to allow you to copy the xml notation of a tab as you may not know by hard.

9.7.13 Guides

The guide system adds some attributes to the snap node:

```
<Snap SnapToGrid="0" Threshold="4" SnapToGuideWhileMoving="1" SnapToGuideWhileSizing="1" AutoConnectGadgetsToGuide="0" AlwaysShowGuidePosition="0" GuideSnapThreshold="10" GuideSelectionThreshold="3"/>
```

Equivalent to the guide menu entries, so no need to change inside the ini file.

SnapToGuideWhileMoving="1"

SnapToGuideWhileSizing="1"

AutoConnectGadgetsToGuide="0"

AlwaysShowGuidePosition="0"

These two values are interesting, because it changes the guide behavior in the form:

GuideSnapThreshold="10" - When a gadget gets closer than 10 pixel it snaps to the guide.

GuideSelectionThreshold="3" - Three pixel around a guide, the guide can be selected with the mouse, to make it easier to hit.

9.7.14 Naming Defaults

Default strings (just blank) are stored for the naming tab of the application properties.

```
<Naming VariablePreString="" VariablePostString="" FunctionPreString="" FunctionPostString=""/>
```

You can pre-set your own values here, which will be loaded when a new form is used.

9.7.15 Visual Distance Defaults

```
<Use_VisualDistance>1</Use_VisualDistance> 'normal entry
<Use_VisualDistance>1</Use_VisualDistance> 'entry with additional key: MaxClipping="200"
```

When MaxClipping="200" extra key is present, that value is loaded and used.

9.7.16 Plus + and Minus – Key

It is possible to grow and shrink your selected gadget(s) via the + and - keys. You can use the + and - from the numpad or from the normal keys (for small keyboards or laptops), but there is a problem with the + from the normal keyboard. The + key is located different and combined with other keys when looking at keyboards with different languages. You can change the setting to reflect your keyboard you are using. When looking on a standard English keyboard you would need to press shift and the equals key to reach the + sign, thus the equals scancode of 187 is stored as default.

To customize your keyboard you can change:

*<PLUS_KEY Comment="Enter the scancode/keycode of the key where the +key is located">**187**</PLUS_KEY>*

9.7.17 The canvas gadgetpaint initialization string

will be read from the ini file and can thus be changed.

*<Canvas_GadgetPaint_Init>SetGraphics CanvasGraphics (Canvas)
SetViewport 0,0,GadgetWidth(Canvas),GadgetHeight(Canvas)</Canvas_GadgetPaint_Init>*

This is the part inside the canvas function called by the EVENT_GADGETPAINT. It fits for Max2d when using DX or GL:

SetGraphicsDriver D3D7Max2DDriver()

SetGraphicsDriver D3D9Max2DDriver()

SetGraphicsDriver GLMax2DDriver()

But when using pure GL via the GLGraphicsDriver() then you could not set the viewport as it is a Max2d command. In that case you can edit the string to your needs (e.g. for MiniB3d or Leadwerks engine setup or your own GL engine...)

9.7.18 Menus

Since MaxGuiEx the event source of a menu event does also hold the menu gadget itself, before you were forced to use the event data to sort out where the event came from. Logic Gui can also create the source inside the event loop using the gadget itself. This is useful for window types with attached menus, but also for the classical wait-event loops. Nevertheless the old way using the event data has also some advantages and thus you can choose which way you want the source created. As this is a very seldom thing to change there is only an attribute in the ini file which switches the behavior, search for Menu_TagOrType="1" 0=Tags and 1=Types. The default will be types.

9.7.19 Set Graphics Driver

If applicable, set the driver to some other value. Auto, DX7, DX9 and OpenGL are available, Auto is the default. Search for GraphicsDriver to find the setting.

<GraphicsDriver Comment="Use AUTO, DX7, DX9 or OPENGL. AUTO=default">OpenGl</GraphicsDriver>

9.7.20 Gadget To Gadget Snap

Use the GadgetSnapThreshold to adjust how much the gadgets attract each other.

<Gadget_To_Gadget_Snap While_Moving="1" While_Sizing="1" GadgetSnapThreshold="3"/>

9.8 How to upgrade from an older Logic Gui version

Note: Every time Logic Gui starts up, it's reading the config file and checks if it's up to date. The delivered config file is only a framework and will be completed with your settings during the first start. This is also important to know when you update from an older Logic Gui version. You can copy your config file into the Logic Gui folder and keep your old settings.

9.9 Parking Gadgets

Parking gadgets means, they are setup with all settings and may also with event function and code, but they are just sitting aside, waiting for use.

How to park your gadgets:

When you have switched off the WorkSpace window, then every gadget which does not sit inside a standard window is considered to be parking and thus no source creation. In that case the whole WorkSpace around a window is your gadget parking place and makes it again very easy to try things out.

Note: Gadgets which are parking can be found in the Event Editor and can be set as you want, but the code and the created event functions only appear when moved inside a window.

10. Logic Gui Files (Structure)

When we look at the files used by Logic Gui, we will find the following:

10.1 The main program:

LogicGui.exe — *Start the main program only once from a certain folder. Unpack the archive to another place if you need a second copy running.*

10.2 Files internally used by Logic Gui:

Defaults.xml — *The config file for Logic Gui. It's a xml file, which holds all settings. An error message pops up during start when this file is missing.*

Defaults.xml.bak — *A backup of your latest config is created on every start.*

Lang.xml — *All available languages are stored in this file.*

IntelliSense.xml — *A XML file which holds all menus, commands and tips for the IntelliSense inside the Event Editor. You can add your own stuff, check out the Event Editor how to do that.*

10.3 These files can be inserted into the code:

Append.txt — *For your own functions to append to the created source code. Name and location can be changed.*

GadgetIni.txt — *Code in this file will be inserted between gadget creation code and the event loop. Perfect to setup or customize the freshly created gadgets. Name and location can be changed.*

RawEvent.txt — *All commands from this file are put directly into the event loop created by Logic Gui, thus perfect for your own designed gadgets, or OnEvent functions.*

Header.txt — *The Header file will be put in front of the code and can contain your imports, includes, variable definitions and such. Name and location can be changed.*

TlistView.bmx — *The ListView type will be included in the source code when the gadget is in use.*

TForm.bmx — *The base type for window type creation.*

TFormTimer.bmx — *An independent application timer.*

10.4 Directories:

FunctionCode — *A directory which holds a file for every gadget type. In those files you could store static content which should always be included when a certain gadget is used.*

With these function files you are able to add some code to every event function. Different Function files can be used for different events. So you are able to add different code to a GADGETACTION event than to a GADGETSELECT event on different gadgets. This could be nice if you like to do always same things on same

	events on certain gadgets. It's configured via the ini file, but you need the structure to see how it's works.
	If a function file is available it is used! So, if you need only certain events move all other to maybe a folder "unused" or something like that.
	The general usage can be turned on or off via the application/files properties. The default is off.
SmartButtons	*A directory to store your SmartButton config files, which can then be read by Logic Gui.*
Templates	*A place to save Logic Gui forms, which are directly accessible from the designer and can be inserted by one click.*
ExternalTypes	*A directory to store some external types, which can be imported.*
PostProcessing	*A directory where you can store the UPX.exe for compression and your own post processing scripts and executables.*

10.5 Others:

ReleaseNotes.pdf	*The latest release notes of this version.*
SmartButton.pdf	*Latest SmartButton document.*
Eula.txt	*End-user license agreement.*
Untitled.LG	*A Logic Gui form (.LG), which was not yet given a name.*
FormName.LG.old	*Backup of the Form before edit. There are also .older and .oldest files from prevoius sessions may available (can be switched on/off from the options menu).*

11. Demos

11.1 Part 1:

Building a simple caculator

11.1.1 http://jsp.logiczone.de/Videos/Calculator.htm

11.2 Part 2:

How to work with the layering in Logic Gui

11.2.1 http://jsp.logiczone.de/Videos/Layer.htm

11.3 Part 3:

Explaining the special gadgets Tabber, Splitter and ScrollPanel.

11.3.1 http://jsp.logiczone.de/Videos/TabSplitScroll.htm

11.4 Part 4:

When building multi language forms, check out this tutorial.

11.4.1 http://jsp.logiczone.de/Videos/MultiLanguage.htm

11.5 Part 5:

11.5.1 http://jsp.logiczone.de/Videos/Guides.htm

11.5.2 http://jsp.logiczone.de/Videos/MediaManager.htm

11.5.3 http://jsp.logiczone.de/Videos/Anchors.htm

11.6 ListView Demo

Show the different views and capabilities of the TlistView gadget (Extended Multi Column ListBox)

11.6.1 http://jsp.logiczone.de/downloads/ListViewDemo.zip

12. How To...

12.1 Archive/Backup Your Form

At a certain point in development of your form, you may want to archive all your data. You may ask yourself, what is needed to have a safe backup.

All the text you typed in the application files are stored directly in those files.

All the text you typed in the gadget events, are stored inside the Logic Gui form (.lg).

All media used in the form are external and Logic Gui stores only a link to them.

All modules imported need to be there the next time you compile the form or it would fail.

All includes need to be accessible.

To backup your code/program the best option is to use the "Export" function of Logic Gui. It is made not only for export, but also to archive your data.

The "Export" function does several things for you:

1. *Collects all external files Logic Gui has a pointer to.*
2. *Creates relative paths out of absolute paths, thus computer independent.*
3. *Stores all (external and internal) files in a standard zip (but named .ELG = Export Logic Gui file), which can then be send to others.*
4. *Writes a log file when and how the archive was written.*

For all your programming environment you have to take care yourself. That means Bmax version, MaxGui version, modules, include files.

12.2 Create Independent Window and Panel Types

If you are programming in OOP style you may appreciate that Logic Gui can provide you also with independent window and panel types.

The main differences to the classical source code is:

Functions will become a Method, the gadget creation part will be in a CreateForm() Method and the event queue part in a OnEvent() Method. The GadgetIni file will sit inside every type and hold your own gadget initialization method(s) and other extensions. The form can extend the TForm type, to be handled by the window management functions.

The Append file can call your form type instance.

As the OnEvent Method is directly called by the TForm hook function, you can immediately act on events (e.g. slider events or window resize events).

When switching to type creation, for every window there is a 'Manage' field set which resides in the TForm base type (window manager), as well as the GadgetExtra() of the window. While the Manage field holds the window:TGadget reference, the current type is built for, the GadgetExtra holds the type instance itself. Those extra information can be used by the window manager, or by yourself.

12.2.1 Concept Of Independent Types

When you enable the automatic type creation, then for every window an independent type is produced.

Panels produces an independent type only when in the properties the “Create As Type” is enabled.

```
Type Twindow1

        'creates the window and gadgets and takes care about the method callback when an event occurs
```

```
End Type
```

The advantage is that you can call those types more than once if needed. The code and name-space is separated from other stuff and thus easier reusable.

Every type does have an OnEvent() Method, similar to the known old event loop. The big difference is, that this OnEvent() Method is hooked in the event queue. That means that no WaitEvent() is used and thus every event is immediately processed! This is another important advantage over the classical way. Probably everyone noticed already that certain events are only emitted after some actions, but not during the action. For example a scrollbar change or a window resize as the most known ones. Now your program can immediately act on those events, resize your gui while the user resizes the window.

To have the event routing working, there is a base type, the TForm type. The TForm acts not only as an event router, but also as a window manager and brings an oop interface to your form.

```
Type TForm
        'base type
End Type
Type TWindow1 Extends TForm          <--- Extending the base type

        Field Window:TGadget         <--- Gadgets using events, should be defined as field

        Method CreateForm()          <--- Normal creation code
        End Method

        Method OnEvent()             <--- Events processed here, called from the base type
        End Method
        ...
End Type
```

The TForm type itself is 'hidden' from the source in an external directory and will only be imported when needed. You can even write your own, if you like.

As you probably know a type has to be build otherwise it does nothing. So to create one instance of your form you need to write:

```
New TWindow1.CreateForm()
```

New, creates a new type of TWindow1 and the .CreateForm() method initializes this new form with the actual gadgets. If you need to access the form later, you can store the reference of this form in a variable like this:

```
Local MyFirstWindow:TForm = New TWindow1.CreateForm()
```

Storing the reference to your form allows you also to use the oop interface of the TForm Type. For Example:

```
MyFirstWindow.HideForm()
MyFirstWindow.ShowForm()
```

Check out all the available commands below in the documentation.

Another difference is, that there is no main loop any more, so unless you don't take care, the program will end immediately!

To overcome this we can have a dummy loop, which gives all power to the system unless we get an event we want to process.

```
While TForm.FormsExist()             <--- Unless there is a form registered to the base TForm Type
        WaitSystem                   <--- Control back to the OS
```

```
Wend
```

A good place for the form creation and dummy loop is the 'Append' file, which sits at the end of the source code. To open it go to the Properties Editor / Application / Files / and look for the Append file.

To customize your independent type even further you can use the window properties from Logic Gui.

```
Type TWindow1 Extends TForm
        Field Window:TGadget

        Field MyOwnField1:int                   <--- Use the 'Inside the Window/Panel Type' data to add
        Method MyOwnMethod()            <--- extra Fields or Methods to the type
        End Method                              <--- available under the TForm tab of the window/Panel

        Method InitForm()                       <--- When using a method named 'InitForm()'
                'Initialize your gadgets here
        End Method                              <--- it will be called automatically after CreateForm()

        Method CreateForm
        End Method
        ...
End Type
```

```
Method InitForm()
    'Will be called after gadget creation
End Method
```

The Method InitForm is inserted automatically in the source code from Version 5.5 and up, so you don't have to remember anymore what was the correct name.

When you need extra calls to your own OnEvent() functions:

```
Type TWindow1 Extends TForm             <--- Extending the base type
        ...
        Method OnEvent                  <--- Events processed here, called from the base type

                'Call you own OnEvent functions here, via the 'Inside OnEvent Method' data.
        End Method
        ...
End Type
```

Try out the exported Logic Gui files in the Examples folder!

Be aware that the Method CreateForm between a window and a Panel was a bit different in the past, they have now the same syntax.

The parent gadget of a panel is a must, X and Y can be set or will be zero. Also the window this panel

belongs to (may not be the parent) can be set, which is needed for pop-ups, but can also be useful for other stuff.

Panel -> Method CreateForm:TForm(Parent:TGadget,X:Int=0,Y:Int=0,WindowParent:TGadget=Null)

X and Y are of course there to position the new type immediately at the right position inside the chosen parent.

12.3 Reflection

Using reflection, programs can 'inspect' objects and types at runtime. You can determine the fields and methods contained in an object or type, set and get object fields and invoke - or 'call' - object methods.

What does that mean to Logic Gui and MaxGui?

When using Logic Gui's type creation you can access those types via reflection. Checkout below a possible scenario.

When creating a user interface, one would try to make it as independent as possible, the same as the functions you use again and again, just with different parameters. Imagine you have build a certain input form, for example a textfield to enter a path, very simple. This form can be used several times in your application, so a good idea to have it as a separate type. The same would be fine for a float, integer, color chooser or the like.

Now, imagine a property grid where all kind of parameters are shown and the user is able to change the values. The type and sequence of the parameters are determined by some other means, could be from an ini file or even from another BlitzMax type and their fields.

So at that point the reflection comes in quite handy, because you can call the creation of a certain form just by knowing the name of the form.

Let's have a look:

```
'First we create a new type. As we don't know which type is later used we choose Object as container.
Local NewType:Object

'Next step would be to find the correct type where we only know the name.
'The name can be read from an ini file or may stored as metadata of fields etc. here stored in NameOfType$
Local MyType:TTypeId =TTypeId.ForName( NameOfType$ )

'We will check if the finding of the type was successful and then we go to create a new instance
If MyType
        NewType:Object =MyType.NewObject()
End If

'Of course the new instance will not yet give us immediately a new form, we need to call the CreateForm Method.
'As we don't know what form exactly is meant – just imagine you have twenty forms and of one the name is read from the ini file – we need to cast the NewType to the base TForm type.
TForm( NewType ).CreateForm( TheParentGadget,X,Y )
```

And voila the form is done! Without reflection we would have needed may twenty Select Case or If Then statements with casting to find the correct form.

```
'To pass some parameters into the newly created form without knowing which form was chosen you can use the SetParameters() method.
'Create a list...
Local Parameters:TList =New Tlist

'add some attributes
Parameters.Addlast(Attribute1)
Parameters.Addlast(Attribute2)
'add maybe also the calling type for later reference (and so on...)
Parameters.Addlast(Self)
'and set the parameters
TForm( NewType ).SetParameters( Parameters )
```

So what happens inside that type with you parameters? First of all, nothing!

The SetParameters is a method from the base type and you need to define your own method in your own type to override it. Only then your method is called and is able to process the given attributes.

There is also a GetParameters available in the base type if you need to get something out...

13. External Types

13.1 TListView

Like a multicolumn listbox, but far more powerful, unfortunately windows only.

Used by Logic Gui.

13.2 TForm

The TForm type is there to act as a base type for all extended window types. It will also provide some OOP interface and convenient functions. The TForm type will be automatically imported when Logic Gui type creation is enabled and the TForm type is chosen in the types tab. Use the IntelliSense in the Event Editor (CTRL+Space) to get a list of all commands at your fingertips.

13.2.1 Getters and Setters

For internal fields:
SetManage, GetManage, SetGroup, GetGroup, SetExtraObject,GetExtraObject

SetManage sets the gadget which should be managed by the window manager.
SetGroup sets the group(s) the extended type should belong to (String Array).
SetExtraObject is free for your own personal use.

SetParameter and GetParameter can be used to set or get an unlimited amount of values (via a TList) to or from independent types.

The SetParamters takes a TList as parameter and the GetParameters returns a TList.

Method SetParameters(List:TList)

Method GetParameters:TList()

These methods can be overwritten inside the independent types created by LogicGui and allows you to pass any amount of parameters in and out the types. This is useful when using reflection, to be generic and flexible as possible. Of course only you know the meaning of those parameters you pass in and how to process them

13.2.2 Standard Methods

Some standard methods you can use:
FreeForm, ShowForm, HideForm, ActivateForm, MinimizeForm, MaximizeForm, RestoreForm, EnableForm, DisableForm, RedrawForm, SetTextForm, SetPositionForm, SetShapeForm

13.2.3 Feedback

Getting some infos back:
IsDisabled, IsHidden, IsMaximized, IsMinimized, FormX, FormY, FormWidth, FormHeight, FormText

13.2.4 Groups

GetGroupMembers, EnableGroup, DisableGroup, DisableAllOthers, ShowGroup, HideGroup, HideAllOthers, MoveGroup, ContainsGroup, AddGroup

GetGroupMembers returns a list of forms belonging to a certain group.
Enable-, DisableGroup enables or disables all group members.
DisableAllOthers disables all other forms except the current (modal).

Show-, HideGroup shows or hides all group members.
HideAllOthers hides all forms except the current form.

MoveGroup moves all members of the group relative from their current position. Move all windows of a group when moving one for example. You can define if only the children of a certain form should be moved.

Imagine you have a form say the MainWindow and this form has several child windows on top. So one can easily use the MoveGroup command to move all child windows with the MainWindow. That's nice, but now imagine the MainWindow is also an independent LogicGui type and you want to open more than one MainWindow at a time. All child windows on top of those two MainWindows would have moved immediately with any of the MainWindow because all are in the same group! When the parameter 'OnlyChildren' is set to true, every instance of the MainWindow will only move it's own child windows on top.

ContainsGroup returns true when the current form belongs to the group you ask for.

AddGroup lets you add a form to another group on the fly.

13.2.5 Functions

Functions can be called from outside the type or independent of an instance:

For example use TForm.ShowAll() to show all registered forms.

HideAll(), ShowAll(), FreeAll(),FormExists:int(ThisForm:TForm)

13.3 TFormTimer

An independent application timer which will be automatically used from Logic Gui when enabled.

Of course you can use the timer also on your own, in that case you should have a look in the source code.

The advantage of this timer type is, that it hooks itself in the events and calls your program-function, even when the normal event queue is halted (by a dialogue or pressed mouse button and such...)

For more information and an example see also the description under the application “Types” tab and the application “Timer” tab.

13.3.1 Getter and Setter

GetName, SetName, GetTimer, SetTimer, GetHertz, SetHertz, GetEvent, SetEvent